

DOCKET SECTION

VP/CW-T-1

BEFORE THE  
POSTAL RATE COMMISSION  
WASHINGTON, D.C. 20268-0001

POSTAL RATES AND FEE CHANGES, 1997

Docket No. R97-1

Direct Testimony of

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Concerning

STANDARD A ENHANCED CARRIER ROUTE MAIL

on Behalf of

VAL-PAK DIRECT MARKETING SYSTEMS, INC.,  
VAL-PAK DEALERS' ASSOCIATION, INC., AND  
CAROL WRIGHT PROMOTIONS, INC.

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**AUTOBIOGRAPHICAL SKETCH**

My name is John Haldi. I am President of Haldi Associates, Inc., an economic and management consulting firm with offices at 680 Fifth Avenue, New York, New York 10019. My consulting experience has covered a wide variety of areas for government, business and private organizations, including testimony before Congress and state legislatures.

In 1952, I received a Bachelor of Arts degree from Emory University, with a major in mathematics and a minor in economics. In 1957 and 1959, respectively, I received an M.A. and a Ph.D. in economics from Stanford University.

From 1958 to 1965, I was assistant professor at the Stanford University Graduate School of Business. In 1966 and 1967, I was Chief of the Program Evaluation Staff, U.S. Bureau of Budget. While there, I was responsible for overseeing implementation of the Planning-Programing-Budgeting (PPB) system in all non-defense agencies of the federal government. During 1966 I also served as Acting Director, Office of Planning, United States Post Office Department. I was responsible for establishing the Office of Planning under Postmaster General Lawrence O'Brien. I established an initial research program, and screened and hired the initial staff.

1           I have written numerous articles, published consulting studies, and co-  
2           authored one book. Included among those publications are an article, "The  
3           Value of Output of the Post Office Department," which appeared in *The*  
4           *Analysis of Public Output* (1970); a book, *Postal Monopoly: An Assessment of*  
5           *the Private Express Statutes*, published by the American Enterprise Institute  
6           for Public Policy Research (1974); an article, "Measuring Performance in Mail  
7           Delivery," in *Regulation and the Nature of Postal Delivery Services* (1992);  
8           and an article, "Cost and Returns from Delivery to Sparsely Settled Rural  
9           Areas," in *Managing Change in the Postal and Delivery Industries* (1997;  
10          with L. Merewitz).

11          I have testified as a witness before the Postal Rate Commission in  
12          Docket Nos. MC96-3, MC95-1, R94-1, SS91-1, R90-1, SS86-1, R84-1, R80-1,  
13          MC78-2 and R77-1. I also submitted comments in Docket No. RM91-1.

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**I. PURPOSE OF TESTIMONY**

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**This testimony has the following principal purposes: (1) to develop bottom up costs for Standard A ECR mail; (2) to use those bottom up costs to examine the Postal Service's proposed rate design; and (3) to propose alternative rates for Standard A ECR Mail that are designed within the context and economic logic of bottom up costs. For the reasons stated herein, I do not support the extremely high coverage proposed by the Postal Service for Standard A ECR Mail. Nevertheless, to facilitate Commission analysis of the principles of rate design underlying my proposed rates, rates proposed here provide the same revenues and contribution to institutional cost as the rates proposed by the Postal Service.**

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## II. INTRODUCTION

2           This testimony is presented on behalf of Val-Pak Direct Marketing  
3       Systems, Inc. (VPDMS) and Val-Pak Dealers' Association, Inc. (VPDA),  
4       hereinafter collectively referred to as "Val-Pak," and Carol Wright  
5       Promotions, Inc., d/b/a "Cox Direct," hereinafter referred to as "Carol  
6       Wright/Cox Direct." As described more fully below, Val-Pak's mail primarily  
7       consists of letter mail sent at the Standard A Mail ECR Saturation rate, and  
8       Carol Wright/Cox Direct's mail consists of both letter mail and nonletter mail  
9       primarily sent at the Standard A Mail ECR High-Density rate.

10           Val-Pak Direct Marketing Systems, Inc. is the nation's largest firm in  
11       the subset of the hard-copy, direct mail cooperative advertising industry  
12       which is sometimes referred to as "coupons in an envelope." Carol  
13       Wright/Cox Direct is one of the largest firms in this same market segment.  
14       Both companies' headquarters offices are located in Largo, Florida. Val-Pak  
15       Direct Marketing Systems, Inc., and Carol Wright Promotions, Inc. are  
16       wholly-owned subsidiaries of Cox Enterprises, Inc. of Atlanta, Georgia. Val-  
17       Pak and Carol Wright/Cox Direct jointly mail over 800 million pieces  
18       annually.

**1 VPDMS Mailing Practices**

**2 VPDMS mailed 341 million pieces in the United States in 1996, and**  
**3 estimates it will mail 360 million pieces in 1997.**

**4 About 95 percent of VPDMS' mailings use letter-shaped number 10**  
**5 envelopes, while about 5 percent use letter-shaped 6" x 9" envelopes. All**  
**6 envelopes are trayed by VPDMS for individual carrier routes and entered at**  
**7 the Standard A Mail ECR Saturation Rate.**

**8 In business for 30 years, VPDMS operates in all 50 states through**  
**9 approximately 210 U.S. franchisees which are members of the Val-Pak**  
**10 Dealers' Association, Inc. The work of these franchisees is supplemented by**  
**11 efforts of approximately 1,200 sales representatives.**

**12 VPDMS' mailings reach 47.7 million households and over 1 million**  
**13 businesses in the United States each year. Its mailings can be highly**  
**14 targeted to meet the marketing needs of even the smallest retail businesses.**  
**15 This is accomplished by Val-Pak's geographic advertising plan, which divides**  
**16 the country into thousands of "Neighborhood Trading Areas" (NTAs), most**  
**17 consisting of approximately 10,000 residences. These NTAs are built around**  
**18 neighborhood purchasing patterns, taking into account factors such as traffic**  
**19 zones and natural barriers such as rivers. Through this NTA construct,**  
**20 businesses can target precisely for advertising purposes those geographic**  
**21 market segments that are most economically attractive. Advertisers may**

1 purchase coverage for the entire nation, or any number of NTAs, from several  
2 thousand down to only one.

3 Many franchisees mail at least eight times per year, with the larger  
4 offices mailing on a monthly schedule. The average Val-Pak advertiser mails  
5 seven times annually.

6 Each year, over 130,000 individual advertisers have purchased  
7 Saturation advertising with VPDMS. Some of these advertisers are national  
8 or regional businesses, but the vast majority are small, local businesses.

9 Once an advertiser places an order with a VPDMS franchisee for  
10 distribution of a particular coupon to a particular geographic area with a  
11 particular frequency, the order is directed to Val-Pak's corporate  
12 headquarters in Largo, Florida. There, the graphics for the coupon are  
13 created. VPDMS fashions as many as a quarter of a million advertising  
14 layouts each year.

15 After review and approval by the advertiser, the coupons are printed  
16 and mailed either in Largo, Florida or Las Vegas, Nevada (for 11 western  
17 states). Printing may be simple, involving only one color, or may involve  
18 sophisticated four-color printing.

19 VPDMS has been encouraged by the Postal Service to put delivery  
20 point barcodes on all of its mail. At present, 100 percent of VPDMS' mail is  
21 delivery point barcoded. VPDMS incurs additional computer charges as a  
22 result of adding the delivery point barcode to mailing lists that have only ZIP



1 + 4 information. VPDMS works closely with firms supplying mailing lists to  
2 ensure that it uses the cleanest and most up-to-date lists available anywhere.  
3 For example, when the Postal Service makes changes in boundary lines,  
4 these lists are updated by list companies supplying VPDMS with the next  
5 bimonthly update from the Postal Service.

6 For 9 years VPDMS also participated voluntarily in Postal Service  
7 tests, such as those involving traying letter-shaped carrier route mail and  
8 palletizing trays, despite the fact that these procedures caused VPDMS to  
9 incur additional costs. VPDMS was a national test site for such tests. Since  
10 such traying became mandatory, VPDMS has been in full compliance.

11 Virtually all of VPDMS' mail is transported by truck at VPDMS'  
12 expense, and 98 percent is entered at the destinating SCF. The remaining 2  
13 percent is entered at BMCs (with a fraction of a percent of the mail being  
14 entered locally in the St. Petersburg, Florida area).

15 VPDMS advertisers require that the Val-Pak mail be delivered in a  
16 timely fashion. For example, if a pizza carry-out firm issues \$1-off coupons to  
17 be delivered during a particular week, it must anticipate the additional  
18 business generated by purchasing additional ingredients and hiring  
19 additional staff. If the mail is not delivered in a timely fashion, the extra  
20 ingredients can be wasted and the staff can stand idle. VPDMS therefore  
21 strives to achieve consistent performance. In VPDMS' 30-year history, it has  
22 never missed a mail date for a customer.

1           Several other national or regional firms around the country are known  
2           to operate in a manner similar to that of Val-Pak. Money Mailer of  
3           Manhattan Beach, California, is believed to be the second largest such firm,  
4           followed by many others, such as Super-Coups in Boston, Massachusetts,  
5           United Coupon in Springfield, Virginia, and Tri-Mark in Wilmington,  
6           Delaware. Many other competitors operate only in limited geographic  
7           markets.

#### 8           **Carol Wright/Cox Direct's Mailing Practices**

9           Carol Wright/Cox Direct mailed 300 million pieces in 1996, and is  
10          estimated to mail 300 million pieces again in 1997.<sup>1</sup>

11          The Carol Wright/Cox Direct cooperative mailings generally use 6" x 9"  
12          envelopes. All mail is delivery point barcoded.

13          Carol Wright/Cox Direct operates two plants, located in Elm City,  
14          North Carolina and in Washington, North Carolina, which together mail  
15          approximately 30 million cooperative advertisements 10 times per year to  
16          households throughout the United States. These mailings consist of shared

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<sup>1</sup>           In addition to mailing 300 million cooperative advertisements per year, the two Carol Wright/Cox Direct plants in North Carolina operate as letter shops which provide contract mailing services only for the national account customers of Carol Wright/Cox Direct. This contract mailing business of the two plants represents an additional 170 million pieces per year, for a total of 470 million pieces per year.

1 mail advertisements and coupons only for national account customers of  
2 Carol Wright/Cox Direct.

3 The Carol Wright/Cox Direct Cooperative Mailing Program offers  
4 customers highly targeted geographic and demographic distribution of their  
5 marketing message by means of distribution segments based on a market  
6 structure which is also divided into retail trade zones. Further targeting can  
7 be achieved through household level selections based on household  
8 demographics. This capability is accomplished in a cooperative mass mailing  
9 environment through the use of selective inserting technology unparalleled  
10 in this type of product.

11 Timeliness of delivery is a major concern for Carol Wright/Cox Direct  
12 and its customers. All Carol Wright/Cox Direct cooperative mailings have a  
13 one-week delivery target window. Carol Wright/Cox Direct customers  
14 depend on and demand that this standard be met. In many cases, customers  
15 have other promotional efforts scheduled to occur in conjunction with the  
16 distribution of Carol Wright/Cox Direct cooperative mailings, such as radio,  
17 TV, and in-store promotions. Retailers also depend on timely delivery, so  
18 that they will be prepared with sufficient shelf stock and store staffing, and  
19 can utilize those special preparations.

### III. TOP DOWN AND BOTTOM UP COSTS

*In prior testimony before the Postal Rate Commission, I have discussed development of cost estimates and rates from the top down and from the bottom up.<sup>2</sup> Most of that discussion will not be repeated here, but a few salient points are worth summarizing.*

*When developing costs from the **top down**, the Postal Service determines a base cost for a rate subclass, and then computes costs avoided, or costs saved, and deducts avoided costs from the base cost to arrive at the estimated net cost for individual rate categories or rate cells.<sup>3</sup> Thus defined, "top down" describes the procedure that has been used to develop cost estimates for all rate categories within the different subclasses of Standard A bulk mail.*

*When estimating costs from the **bottom up**, the Postal Service computes the amount of volume-variable costs **incurred**, and **adds** costs incurred for different functions and activities, such as sorting and transportation, to arrive at the estimated cost for individual rate categories or rate cells. The volume-variable unit cost for any rate category is the total volume-variable cost of the category divided by the volume.*

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<sup>2</sup> Docket No. R94-1, ANM-T-1, pp. 19-29.

<sup>3</sup> The base cost for a subclass is the average cost for the particular rate category, or rate cell, to which none of the cost avoidances or cost savings apply.

1           The term "bottom up" is a reasonable description of the procedure used  
2           by the Postal Service for some products, *e.g.*, to estimate costs for the  
3           different weight-zone rate cells of Priority Mail.<sup>4</sup> Bottom up estimates of  
4           product costs are common throughout the printing industry (the source of  
5           mail in the Periodicals and Standard A subclasses) and in manufacturing  
6           generally. Bottom up costs are typically the starting point for determining  
7           product prices in these businesses.

8           It has not been customary for the Postal Service to present the average  
9           volume-variable unit costs for individual rate cells, regardless of whether  
10          volume-variable unit costs have been developed by a top down or a bottom up  
11          approach. The failure to present explicit unit cost estimates for individual  
12          products does not mean, of course, that such average unit costs are not  
13          known. In point of fact, implicit in every rate cell is a unique, average unit  
14          cost for mail in that cell, regardless of whether the Postal Service makes the  
15          effort to compute or present it. Moreover, since the average unit cost within  
16          a rate cell is unique, theoretically it should be possible to estimate that  
17          average unit cost either from the top down or from the bottom up.<sup>5</sup>

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<sup>4</sup>           Development of Priority Mail costs for individual rate cells does not involve any estimate of costs avoided.

<sup>5</sup>           An analogy would be computing the highway distance between New York and Miami by (1) taking the Miami-Boston distance and deducting the avoided leg from Boston to New York (top down), or (2) by adding the New York-Washington and Washington-Miami legs (bottom up). Of course, the result should be the same either way. *See also* Docket No. R94-1, ANM-T-1, p. 25.

1           In Docket No. MC95-1, the Postal Service presented a series of cost  
2       models for Standard A mail which were more detailed and comprehensive  
3       than any previously presented. In the present docket, the cost models for  
4       Standard A mail have been further refined through, for example, explicit  
5       attention to certain costs which were not modeled previously in Docket No.  
6       MC95-1. As a result of the more detailed cost information provided by the  
7       Postal Service in Docket No. MC95-1 and this docket, it is now possible for  
8       the first time to develop bottom up estimates of volume-variable unit costs for  
9       each rate cell within the Standard A ECR subclass. Having an explicit unit  
10      cost estimate available for each rate cell provides a useful basis for the  
11      formulation of cost-based rates, and rate design generally. Bottom up costs  
12      for Standard A Mail have therefore been developed separately for letters and  
13      nonletters.

#### 14      Development of Bottom up Costs for ECR Letters

15           In terms of weight, Standard A ECR Letter Mail is relatively  
16      homogeneous in comparison to nonletter mail. By definition, all Standard A  
17      letters weigh less than 3.3 ounces. Any piece of Standard A ECR Mail that  
18      weighs more is defined as a nonletter. Consequently, in this testimony the

1 effect of weight on cost has not been treated as an important consideration  
2 with respect to determining the unit cost of letters.<sup>6</sup>

3 The current rate schedule for Standard A ECR letters consists of 16  
4 different rate cells.<sup>7</sup> The rate cells are distinguished by (i) presort condition,  
5 and (ii) point of entry into the postal network. Each rate cell is thought of,  
6 appropriately, as a separate product. My estimated Test Year volume-  
7 variable unit costs for Standard A ECR letters, including contingency, are  
8 shown in Table 1. The unit costs range from 3.52 cents for a Saturation  
9 letter entered at the delivery unit, to 7.34 cents for a Basic presort letter  
10 entered upstream of the Destinating BMC.

11 **Shipping costs.** Differences in the unit costs, as shown in Table 1,  
12 reflect the Postal Service's costs incurred by mail not entered at delivery  
13 units.<sup>8</sup> Thus, when developing costs from the bottom up, those volume-  
14 variable costs that are incurred for mail which is not dropshipped, and must  
15 instead be handled and transported by the Postal Service, are presumed here

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<sup>6</sup> Even within the letters category, weight may cause costs to vary. Since weight is not part of the rate design for letters, however, its effect is subsumed within the average per-piece cost. *The effect of weight must be, and is, taken into account in the development of bottom up costs for nonletters.*

<sup>7</sup> USPS-T-36, p. 31.

<sup>8</sup> Cost incurrence for postal transportation and dock handling expense is computed on a per-pound basis, consistent with the cost avoidance developed in LR-H-111, and is based on estimated actual weight of the mail in each rate cell; i.e., cost incurrence is not estimated at the breakpoint weight of 3.3 ounces. See Appendix A for more details.

1 to be equal to the costs avoided by mail that is dropshipped to destinating  
2 facilities. Stated succinctly, cost incurrence and cost avoidance are treated as  
3 the two sides of the same coin.

4 **Sortation costs.** Differences in the unit costs in Table 1 also reflect  
5 the Postal Service's presort cost differentials. In my bottom up approach,  
6 costs avoided by presortation likewise have been presumed to equal the  
7 volume-variable costs which the Postal Service must incur to achieve an  
8 equivalent level of sortation. Here too, cost incurrence and cost avoidance  
9 are treated as two sides of the same coin.

10 **Conformity with CRA costs.** Unit costs derived by this bottom up  
11 process, when multiplied by the volume in each respective category, are  
12 slightly (4.9 percent) less than the estimate of total CRA volume-variable  
13 costs for ECR letters.<sup>9</sup> Accordingly, unit costs are adjusted upward by a  
14 uniform amount (0.2749 cents per piece) to conform with the CRA total. A  
15 detailed explanation regarding development of the volume-variable unit costs  
16 in Table 1 is contained in Appendix A.

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<sup>9</sup> See Appendix A for the details concerning development of CRA costs for ECR letters and nonletters.



Table 1

Volume-Variable Unit Cost for  
Standard A ECR Letters, With Contingency  
(test year, cents per piece)

	No Destination Entry	- Entry at Destinating - BMC	SCF	DDU
Basic	7.34	7.08	6.85	6.69
Automation	6.73	6.47	6.24	6.08
High-Density	5.28	4.90	4.69	4.44
Saturation	4.24	3.79	3.71	3.52

Source: Appendix A, Table A-13

### Development of Bottom up Costs for ECR Nonletters

**Nonletters below the breakpoint.** Standard A ECR nonletters can weigh up to 16 ounces. With respect to weight they are less homogeneous than letters. Rates for ECR nonletters vary with weight of the mailpiece. Nonletters that weigh less than the breakpoint (3.3 ounces) now pay a flat per-piece rate, the same as letters.<sup>10</sup> All costs for each rate cell below the

<sup>10</sup> The proposed parcel surcharge is not part of the current rate structure.

breakpoint have been computed on an average per-piece basis, including any costs that are (or may be) pound-related, as is true of ECR letter rate cells.<sup>11</sup>

**Nonletters above the breakpoint.** Nonletters that weigh more than the breakpoint now pay a rate that consists of (i) a per-piece amount, plus (ii) a per-pound rate (multiplied with the weight). For pieces that weigh more than the breakpoint, pound-related costs need to be isolated and identified (*i.e.*, as certain amount per pound); they are not to be transformed into per-piece averages.

If weight-related costs are known, development of bottom up costs becomes a fairly straightforward exercise. In this docket, however, development of bottom up costs for Standard A ECR nonletters is complicated by the fact that the Postal Service has again failed to present any reliable evidence concerning which costs should be treated as pound-related and which costs should be treated as piece-related (*i.e.*, on how weight affects cost).<sup>12</sup> In order to develop bottom up costs for nonletters, it is therefore necessary to make an assumption concerning the effect of weight on certain costs.

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<sup>11</sup> That is, pound-related costs such as shipping are computed for each cell on the basis of weight, after which they are divided by volumes, which translates the per-pound cost into an average per-piece cost. The underlying costs (*e.g.*, shipping) are still a function of weight, not the number of pieces.

<sup>12</sup> USPS-LR-H-182 purports to study the weight-cost relationship for Standard A Mail. See Appendix D for further discussion.

1           To illustrate the methodology used here to develop bottom up volume-  
2           variable unit costs for Standard A ECR nonletters, two different cases are  
3           presented below. In Case I, moderately high weight-related costs are  
4           assumed, and in Case II, moderately low weight-related costs are assumed.<sup>13</sup>  
5           As explained below, in the absence of solid evidence concerning the weight-  
6           cost relationship, both assumptions are arbitrary. The two cases are  
7           included to deal with the reality of the Postal Service's failure to advance  
8           either a credible theory or reliable empirical evidence on the relationship  
9           between weight and cost.

10           **Conformity with CRA costs.** In both cases, the unit cost for all ECR  
11           nonletters has been adjusted to equal estimated CRA costs for nonletters.  
12           This serves as a control to prevent shifting of costs from letters to nonletters,  
13           and vice versa.<sup>14</sup>

14           **Case I: High weight-related costs.** In Case I, mail processing and  
15           delivery costs equal to 2.33 cents per piece are assumed to be weight-related.  
16           The effect of this assumption is to shift costs from lighter-weight nonletters  
17           below the 3.3 ounce breakpoint to heavier-weight nonletters above the

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<sup>13</sup>       Some city carrier street time costs may be weight-related; see NAA/USPS-T36-17, redirected to the Postal Service. (This response was designated, but was not incorporated into Volume 19 of the transcript.)

<sup>14</sup>       In both cases, the small, final adjustment to conform to total CRA costs for nonletters is treated as weight-related, as was done with letters.

1 breakpoint. For Cases I and II, bottom up volume-variable costs, with  
2 contingency, are shown in Table 2.

3 Although the decision in Case I to treat 2.33 cents per piece as weight-  
4 related cost is arbitrary, the rationale by which it was derived is as follows.  
5 Witness Moeller's proposed piece rate for pound-rated Saturation nonletters  
6 is 3.2 cents.<sup>15</sup> For nonletters, the implicit coverage on volume-variable cost is  
7 approximately 220 percent. Using witness Daniel's per-piece data for mail  
8 processing, delivery, transportation, and other costs, the unit cost for a  
9 Saturation letter would be 3.8527 cents per piece.<sup>16</sup> Shifting 2.33 cents of  
10 this amount to weight-related cost leaves a piece-related cost of 1.5227 cents  
11 which, when multiplied by a slightly-reduced coverage of 210 percent, results  
12 in 3.2 cents, which is the same as witness Moeller's proposed rate.<sup>17</sup>

13 The decision to shift 2.33 cents from per-piece costs to pound-related  
14 costs increases weight-related cost by 11.91 cents per pound. Treating  
15 "other" costs as pound-related further increases the weight-related cost for  
16 mail entered at DDUs by another 0.54 cents per pound, to 12.45 cents per  
17 pound. The final adjustment for contingency increases the pound cost for

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<sup>15</sup> USPS-T-36, p. 31.

<sup>16</sup> Appendix A, Table A-1.

<sup>17</sup> The next section of this testimony analyzes margins and mark-ups (over cost) implicit in the Postal Service's proposed rates. Treating 2.33 cents of piece-related costs as weight-related results in piece-rated and pound-rated nonletters having generally similar markups.

1 DDU entry to 12.57 cents, while the cost for mail with no destination entry is  
2 26.50 cents per pound; these are the pound rates for Case I shown in Table  
3 2.<sup>18</sup>

4 **Case II: Low weight-related costs.** In Case II, mail processing and  
5 delivery costs equaling to 0.5825 cents are assumed to be weight-related.  
6 This assumption shifts costs from heavier-weight nonletters above the 3.3  
7 ounce breakpoint to lighter-weight nonletters below the breakpoint. The  
8 assumption that 0.5825 cents per piece of the mail processing and delivery  
9 cost is weight-related is as arbitrary as the assumption of Case I. It is simply  
10 one-fourth of 2.33 cents, which is the assumption used to develop Case I. In  
11 Case II, the per-pound cost for nonletters entered at DDUs is 3.51 cents,  
12 while the per-pound cost for non-destination entry nonletters is 17.44 cents.<sup>19</sup>  
13 These are the pound rates for Case II, which are also shown in Table 2.

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<sup>18</sup> Appendix A, Table A-18. Witness Moeller proposes a rate of 53 cents per pound for ECR mail with no destination entry. USPS-T-36, p. 31. His rate thus has an implicit coverage of 202 percent over the weight-related cost assumed in Case I.

<sup>19</sup> Appendix A, Table A-24. In this scenario, witness Moeller's rate of 53 cents per pound represents a coverage of 304 percent over assumed cost.

Table 2

Standard A ECR Nonletters  
TYAR Final Adjusted Unit Costs  
(including contingency, cents)

**Case I: 2.33 Cents per Piece Treated as Weight-Related Cost**

		No Destination	- Entry at Destinating -		
		<u>Entry</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>
	Piece-Rated, per piece				
	Basic	8.99	8.19	7.90	7.54
	High-Density	6.16	5.25	5.07	4.71
	Saturation	4.21	3.38	3.35	3.04
	Pound-Rated, per piece				
	Basic	5.96	5.96	5.96	5.96
	High-Density	3.13	3.13	3.13	3.13
	Saturation	1.46	1.46	1.46	1.46
	Pound-Rated, per pound				
	Basic	26.50	17.37	15.34	12.57
	High-Density	26.50	17.37	15.34	12.57
	Saturation	26.50	17.37	15.34	12.57

**Case II: 0.5825 Cents per Piece Treated as Weight-Related Cost**

		No Destination	- Entry at Destinating -		
		<u>Entry</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>
	Piece-Rated, per piece				
	Basic	9.62	8.81	8.53	8.17
	High-Density	6.79	5.88	5.69	5.34
	Saturation	4.84	4.01	3.98	3.66
	Pound-Rated, per piece				
	Basic	7.73	7.73	7.73	7.73
	High-Density	4.90	4.90	4.90	4.90
	Saturation	3.22	3.22	3.22	3.22
	Pound-Rated, per pound				
	Basic	17.44	8.31	6.28	3.52
	High-Density	17.44	8.31	6.28	3.52
	Saturation	17.44	8.31	6.28	3.52

Source: Appendix A, Tables A-18 and A-24.

1                   **IV. ANALYSIS OF THE POSTAL SERVICE'S**  
2                   **PROPOSED RATES FOR STANDARD A ECR MAIL**

3           **Introduction**

4           The postal rate-setting process apportions non-volume-variable costs  
5           in two steps. The first step establishes a target contribution for each class  
6           and subclass of mail, using the criteria specified in 39 U.S.C. Section  
7           3622(b).<sup>20</sup> Collectively, these target contributions assure that the Postal  
8           Service will cover all of its costs and meet its revenue requirement.

9           Step two determines how much to charge each subgroup of products  
10          (e.g., ECR letters), and each rate category within a subclass. This step  
11          defines the amount in excess of volume-variable cost that each rate cell  
12          contributes to other costs. Mailers who enter mail in only one or two rate  
13          cells are more concerned with the coverage assigned to the rates which they  
14          use, than with the average coverage for the subclass as a whole.

15          **Rate Design**

16          This is the second step mentioned above. Determination of specific  
17          rates for each individual category, or rate cell, within a subclass is typically  
18          referred to as rate design. Cost differences, sometimes referred to as costs

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<sup>20</sup> See USPS-T-30, testimony of witness O'Hara.

1 avoided in the context of top down rate design, are the starting point for rate  
 2 differences within a subclass. Rates for Standard A Mail are designed by the  
 3 Postal Service using a top down approach. Here, rate differences between  
 4 various rate categories are referred to as worksharing discounts. These  
 5 discounts reflect varying passthroughs of costs avoided. Postal Service  
 6 rate design experts rely on the criteria of 39 U.S.C. Section 3622(b) to  
 7 rationalize the extent to which differentials in costs avoided are transformed  
 8 into rate differentials in the final design.

9 Section 3622(b) criteria. To illustrate the preceding point, witness  
 10 Moeller, in his discussion of proposed rates for Standard A mail, repeatedly  
 11 invokes the “need to temper the increase on any one rate category to  
 12 customers” (criterion 4).<sup>21</sup> Also mentioned are:

- 13 • The “below cost rate problem” (criterion 3);<sup>22</sup>
- 14 • The desire for simplicity in the rate structure (criterion 7);<sup>23</sup>
- 15 • His concern that the proposed surcharge not be perceived as  
 16 “inappropriate or unfair” (criterion 1);<sup>24</sup>

---

<sup>21</sup> USPS-T-36, p. 10; see also pp. 13, 16, 17, 20, 28, 29, 30, and response of witness Moeller to VP-CW/USPS-T36-5 (Tr. 6/2899).

<sup>22</sup> USPS-T-36, p. 12.

<sup>23</sup> USPS-T-36, pp. 13, 15 and response of witness Moeller to DMA/USPS-T36-3 (Tr. 6/2740-41).

<sup>24</sup> USPS-T-36, p. 13 and response of witness Moeller to DMA/USPS-T36-3 (Tr. 6/2740-41).



- 1           •     The desire to give appropriate recognition to “the value of
- 2                     worksharing activity” (criterion 6);<sup>25</sup> and
- 3           •     the need for the rate structure to be “sensitive to, and priced
- 4                     competitively with, the alternatives” (criterion 5).<sup>26</sup>

5           Although witness Moeller appears to focus on criterion 4, he also

6           invokes criteria 1, 3, 5, 6 and 7 of the Act at least once.<sup>27</sup> He states that

7           “[r]atesetting involves balancing this factor [criterion 4] with the other

8           criteria of the Act, including cost considerations.”<sup>28</sup>

9           The preceding development of the volume-variable unit cost for each

10          rate cell, in Section III of this testimony, facilitates analysis of the Postal

11          Service’s proposed rates, as well as alternative rate designs. For example,

12          using the volume-variable unit costs in Table 1, computation of the margins

13          and mark-ups that are implicit in the Postal Service’s proposed rates is a

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<sup>25</sup>       USPS-T-36, p. 16.

<sup>26</sup>       *Id.*, p. 26.

<sup>27</sup>       The only explicit criteria not mentioned by witness Moeller are value of service (criterion 2) and ECSI (criterion 8).

<sup>28</sup>       VP-CW/USPS-T36-5 (Tr. 6/2899). The Postal Service’s First-Class rate design expert, witness Fronk, has a similar view. “The factors, considerations, or principles I think should guide the recommendation of a passthrough for shape-related cost differences are set forth in Section 3622(b) of title 39, United States Code. Section 3622(b) describes the pricing criteria that need to be followed when setting postal rates and fees. The recommended passthrough of cost differences depends on a balancing of the various pricing criteria set forth in Section 3622(b).” NDMS/USPS-T32-6 (Tr. 4/1498).

1 straightforward exercise.<sup>29</sup> The results make possible explicit comparisons  
2 between rate elements.<sup>30</sup>

### 3 Revenues and Costs for ECR Letters and Nonletters

4 Revenues and costs contained in, or derived directly from, Postal  
5 Service projections in this docket for Standard A ECR letters and nonletters  
6 are presented in Table 3. The third row of Table 3 shows the **margin** over  
7 revenues, or contribution to other costs, by letters and nonletters,  
8 respectively. The fourth row shows the margin as a percent of volume-  
9 variable costs, referred to here as the "**mark-up**." From this first row, it can  
10 be readily observed that the Postal Service's proposed rate design marks up  
11 ECR letters about 24 percentage points more than nonletters (*i.e.*, 144  
12 percent versus 120 percent). Unit revenues, costs and margins are shown in  
13 the bottom portion of Table 3.

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<sup>29</sup> Throughout this testimony the term "**margin**" will refer to the difference, stated as an absolute amount, between rates and volume-variable unit costs, and "**mark-up**" will refer to the percentage difference by which rates exceed unit costs. The margin thus represents a shorthand expression for per-piece contribution to the Postal Service's other costs.

<sup>30</sup> The Postal Service's rate design did not set or even consider cost coverages below the subclass level. Response of Postal Service to NAA/USPS-T36-29. This response was designated, but not incorporated into Transcript volume 19; response of witness Moeller to NAA/USPS-T36-48 (Tr. 6/2807), response of witness Moeller to PSA/USPS-T36-5 (Tr. 6/2883), and response of witness Moeller to PSA/USPS-T26-1 (Tr. 6/2887).

Table 3

**Standard A ECR Mail**  
**Revenues and Costs Test Year After Rates**  
**By Shape**  
**(\$, 000)**

		<u>Letters</u>	<u>Nonletters</u>	<u>Total</u>
7	Revenues from Rates	1,210,277	3,052,241	4,262,518
8	Volume-variable Costs,			
9	including contingency	<u>495.916</u>	<u>1,389.524</u>	<u>1,885.440</u>
10	Margin	<u>714.361</u>	<u>1,662.717</u>	<u>2,377.078</u>
11	Mark-up	<u>144.05%</u>	<u>119.66%</u>	<u>126.08%</u>
12				
13	Per Piece (cents)	<u>Letters</u>	<u>Nonletters</u>	<u>Average</u>
14	Revenues	15.28	13.89	14.86
15	Costs	<u>6.96</u>	<u>5.69</u>	<u>6.57</u>
16	Margin	8.32	8.20	8.29
17	_____			
18	Source:	Revenues, Appendix C, Table C-12.		
19		Costs, Appendix A, Table A-2.		
20		Volumes, Appendix A, Table A-6.		

1     **ECR Letters**

2             The following discussion makes use of the bottom up cost figures  
3     computed for the 16 rate cells for Standard A ECR Mail, as presented in the  
4     preceding Section III of this testimony.

5             **Margins.** The implicit margins for the rates proposed by the Postal  
6     Service for each ECR letter rate cell are shown at Table 4, Part A. For all  
7     ECR letters, the average margin, or contribution to other costs, is 8.20  
8     cents.<sup>31</sup> Margins range from a low of 6.71 cents to a high of 9.67 cents per  
9     piece.

10            **Mark-Ups.** The implicit percentage mark-ups for Standard A ECR  
11    letter mail are shown in Table 4, Part B. For all ECR letters, the average  
12    mark-up is 144 percent. Because the highest margin is imposed on  
13    Saturation mail — which has the lowest unit cost — the implicit mark-ups on  
14    ECR letter mail span a wide range, from 100 to 216 percent. The implicit  
15    mark-ups on the different rate categories are seen to vary widely around the  
16    average.

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<sup>31</sup>     The Postal Service did not calculate unit contribution at this level of detail. Response of witness Moeller to NAA/USPS-T36-35 (Tr. 6/2795).

Table 4

**Margins and Mark-Ups Implicit in Postal Service Proposed  
Rates for ECR Letters**

**A. Margins  
(cents per piece)**

6		No Destination	- Entry at Destinating -		
7		Entry	DBMC	DSCF	DDU
8	Basic	8.36	7.12	7.05	6.71
9	Automation	9.67	8.43	8.36	8.02
10	High-Density	9.02	7.90	7.81	7.56
11	Saturation	9.16	8.11	7.89	7.58

**B. Mark-Ups  
(percent)**

14		No Destination	- Entry at Destinating -		
15		Entry	DBMC	DSCF	DDU
16	Basic	114%	100%	103%	100%
17	Automation	144	130	134	132
18	High-Density	171	161	166	170
19	Saturation	216	214	212	215

---

**Sources:** Proposed rates from USPS-T-36, p. 31.  
Unit Costs from ECR letters, Table 1.

1           **As this analysis demonstrates, Saturation mail is not only in a**  
2           **subclass which was assigned one of the highest cost coverages of any**  
3           **postal product, it also makes a disproportionate contribution to**  
4           **institutional costs within the ECR subclass. Not only does Saturation**  
5           **mail contribute a higher percentage of its revenues to institutional costs than**  
6           **other ECR mail receiving more Postal handling, the Postal Service's**  
7           **proposed rates impose a larger cents per piece contribution on Saturation**  
8           **mailpieces. Ironically, Saturation mail is also the ECR mail which is most**  
9           **susceptible to diversion to alternative methods of delivery.**

10           This discrimination, or "anomaly", is due to the Postal Service's  
11           reliance on a top down rate design methodology rather than a bottom up  
12           methodology. *See* discussion in Section V, *infra*.

### 13           **ECR Nonletters**

14           **Piece-rated Nonletters.** As explained previously, Case I assumes  
15           comparatively high weight-related costs. This reduces the costs allocated to  
16           those pieces that weigh less than the breakpoint (3.3 ounces) and pay  
17           **minimum per-piece rates.** The net result of assuming high weight-related  
18           **cost is that (i) volume-variable unit costs are lower, and (ii) margins and**

1     **mark-ups increase. Margins range from 6.6 to 9.9 cents, while mark-ups**  
2     **vary over a wide range, from 82 to 289 percent (see Table 5-A).<sup>32</sup>**

3             **Case II is the reverse of Case I; weight-related costs are assumed to be**  
4     **comparatively low. This increases the cost for all pieces that weigh less than**  
5     **the breakpoint. In Case II, the higher volume-variable unit costs decrease**  
6     **margins and mark-ups (in comparison with Case I). In this case, margins**  
7     **range from 5.9 to 9.3 cents (i.e., about 0.6 cents less than Case I), and mark-**  
8     **ups vary from 69 to 222 percent (see Table 5-B).**

9             **One finding stands out independently of the assumptions of Case I or**  
10    **II. Regardless of whether weight-related cost is assumed to be high or low,**  
11    **Basic nonletters have a significantly lower margin and mark-up than either**  
12    **High-Density or Saturation nonletters. This finding is unaffected by the**  
13    **wide variation of margins and mark-ups implicit in the Postal Service's**  
14    **proposed rate design.**

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<sup>32</sup>     Using the estimated CRA costs for nonletters as a control here limits the effect of a higher or lower pound rate to nonletters. If the CRA letter/nonletter cost constraint were not present, explicit identification of some costs as weight-related would probably shift costs from letters (which have a lower average weight) to nonletters, as discussed in witness Moeller's response to NAA/USPS-T36-51 (Tr. 6/2810-11).

**Table 5-A****Standard A ECR**

**Analysis of Postal Service Rates**  
**Piece-Rated Nonletters**  
 (Case I: 2.33 Cents per Piece Treated as Weight-Related Cost)  
 (cents)

	<b>No Dest. Entry</b>	<b>BMC</b>	<b>SCF</b>	<b>DDU</b>
	----	----	----	----
<b>Proposed Rates [1]</b>				
<b>Piece-Rated</b>				
Basic	16.4	14.9	14.6	14.1
High-Density	15.3	13.8	13.5	13.0
Saturation	14.1	12.6	12.3	11.8
<b>Costs [2]</b>				
<b>Piece-Rated</b>				
Basic	8.99	8.19	7.90	7.54
High-Density	6.16	5.25	5.07	4.71
Saturation	4.21	3.38	3.35	3.04
<b>Margin [3]</b>				
<b>Piece-Rated</b>				
Basic	7.41	6.71	6.70	6.56
High-Density	9.14	8.55	8.43	8.29
Saturation	9.89	9.22	8.95	8.76
<b>Mark-up [4]</b>				
<b>Piece-Rated</b>				
Basic	82%	82%	85%	87%
High-Density	148%	163%	166%	176%
Saturation	235%	273%	267%	289%

**Sources:**

[1] USPS-T-36, p. 31.

[2] Appendix A, Table A-18.

[3] Proposed rate - estimated cost.

[4] Margin/estimated cost.



**Table 5-B****Standard A ECR**

**Analysis of Postal Service Rates**  
**Piece-Rated Nonletters**  
**(Case II: 0.5825 Cents per Piece Treated as Weight-Related Cost)**  
**(cents)**

	<b>No Dest. Entry</b>	<b>BMC</b>	<b>SCF</b>	<b>DDU</b>
	<hr/>	<hr/>	<hr/>	<hr/>
<b>Proposed Rates [1]</b>				
<b>Piece-Rated</b>				
Basic	16.4	14.9	14.6	14.1
High-Density	15.3	13.8	13.5	13.0
Saturation	14.1	12.6	12.3	11.8
 <b>Costs [2]</b>				
<b>Piece-Rated</b>				
Basic	9.62	8.81	8.53	8.17
High-Density	6.79	5.88	5.69	5.34
Saturation	4.84	4.01	3.98	3.66
 <b>Margin [3]</b>				
<b>Piece-Rated</b>				
Basic	6.78	6.09	6.07	5.93
High-Density	8.51	7.92	7.81	7.66
Saturation	9.26	8.59	8.32	8.14
 <b>Mark-up [4]</b>				
<b>Piece-Rated</b>				
Basic	71%	69%	71%	73%
High-Density	125%	135%	137%	143%
Saturation	191%	214%	209%	222%

**Sources:**

[1] USPS-T-36, p. 31.

[2] Appendix A, Table A-24.

[3] Proposed rate - estimated cost.

[4] Margin/estimated cost.

1       **Pound-Rated Pieces Weighing 5 and 10 Ounces**

2               For any given assumption about weight-related costs, analysis of the  
3       Postal Service's proposed rates is comparatively straightforward. Using the  
4       assumptions in Cases I and II above, volume-variable unit costs, margins and  
5       mark-ups have been developed for pieces that weigh 5 ounces and 10 ounces.  
6       These results are shown in Appendix B, Tables B-3, 4, 6 and 7.

7               In both Cases I and II, the highest mark-ups and margins are paid by  
8       Saturation nonletters. Regardless of the assumption about weight-related  
9       costs, the margins for Saturation rate cells are higher (by about 2.3 cents)  
10      than they are for the Basic category rate cells. And, since the Saturation rate  
11      category has lower volume-variable unit costs, the percentage mark-ups are  
12      strikingly higher than mark-ups for the Basic category rate cells.

13      **ECR Cost Coverage is Extremely High**

14              The coverage factor for the ECR Subclass was set at 218 percent in  
15      Docket No. MC95-1, and under the Postal Service's Request in this docket  
16      would increase to 228 percent.

17              **Recent Dockets.** In Docket No. R94-1, the Commission assigned  
18      third-class bulk rate regular ("BRR") (the predecessor mail subclass to  
19      Standard A) a lower cost coverage than First-Class Mail. BRR's mark-up  
20      was only 90 percent of the systemwide average, while the mark-up on First-  
21      Class was 131 percent of the systemwide average. The Commission said that

1       “the lower markup index for BRR reflects its **higher elasticity of demand,**  
2       **the potential for volume diversion to alternative delivery** and the need  
3       **to set rates which are responsive to the market...**[and] the low intrinsic  
4       **value of its service standards and service performance.** Each of these  
5       **considerations must be taken into account under section 3622(b)(2).**”<sup>33</sup>

6               The Postal Service first proposed to create an Enhanced Carrier Route  
7       (“ECR”) subclass within the new Standard A Class, in Docket No. MC95-1.  
8       When presenting its Standard A ECR proposal, Postal Service witness  
9       Moeller testified that the requested cost coverage for Standard A ECR (212  
10      percent) was higher than that recommended by the Commission for any  
11      subclass in Docket No. R94-1.<sup>34</sup> Witness Moeller nevertheless defended  
12      Standard A ECR’s high cost coverage in that docket as necessary to avoid  
13      major changes in rate relationships between subclasses, which were designed  
14      to be revenue neutral.<sup>35</sup>

15              Witness Moeller further testified that, were it not for the concern of  
16      reducing the contribution to institutional costs which BRR had provided, “I  
17      would propose a lower cost coverage for Enhanced Carrier Route.” Standard  
18      A ECR has a relatively low **economic value of service**, and the  
19      **availability of alternatives to Standard A ECR** argues for a lower cost

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<sup>33</sup>       *Op. & Rec. Dec.*, Docket No. R94-1, p. V-93, emphasis added.

<sup>34</sup>       USPS-T-18, p. 6.

<sup>35</sup>       *Id.* at 7.

1 coverage (Sec. 3622(b)(5)); and Standard A ECR has a **high degree of**  
2 **mailer preparation**, supporting a lower cost coverage (Sec. 3622(b)(6)).<sup>36</sup>

3 **Docket No. R97-1.** Witness O'Hara's testimony presents the Postal  
4 Service's explanation and justification for its proposed cost coverages in  
5 Docket No. R97-1. His analysis of the noncost criteria echoed witness  
6 Moeller's analysis in Docket No. MC95-1: "**most of the factors**  
7 **considered...would indicate a cost coverage lower than that actually**  
8 **proposed**" for ECR (emphasis added). For example: the **intrinsic value** of  
9 service (criterion 2) for Standard A ECR is relatively low, since it lacks access  
10 to the collection system, receives ground transportation, and its delivery may  
11 be deferred; the **price-elasticity** (criterion 2) of Standard A ECR is higher  
12 than that of Standard A Regular, First-Class letters, or Periodicals,  
13 indicating a relatively low economic value of service as well; the availability  
14 of **alternatives** (criterion 5) for users of Standard A ECR mail is relatively  
15 **high** — due to its geographic concentration, both alternate delivery firms and  
16 newspaper inserts may provide alternative ways of delivering the same  
17 advertising message; and this mail has a very high degree of **preparation**  
18 **by the mailer** (criterion 6) — even the basic rate category must be line-of-

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<sup>36</sup>*Id.* at 7-8.

1 travel sequenced, and the high-density and saturation categories are walk-  
2 sequenced.<sup>37</sup>

3 Witness O'Hara defends the Postal Service's imposition of a high (228  
4 percent) cost coverage on ECR. He notes that the Postal Service proposes a  
5 3.2 percent average rate increase, which is "somewhat below the system-wide  
6 average increase, reflecting a desire to lower the very high cost coverage of  
7 this subclass." (Emphasis added.) He also notes that a reduction in the ECR  
8 cost coverage could be achieved only by imposing greater rate increases on  
9 other subclasses, and would have made it more difficult to design rates to  
10 encourage the movement of ECR basic letters into the automation  
11 mailstream.<sup>38</sup>

12 If the Commission finds itself unable to reduce the ECR coverage  
13 factor in this docket, a decision with which I would disagree, this makes it all  
14 the more important to ensure that that high coverage level is shared  
15 reasonably by mail within the Subclass. As can be seen from Tables 4, 5A  
16 and 5B, under the Postal Service's proposal, an unduly high share of this  
17 already excessive coverage is being pushed onto saturation mail, the rate  
18 category most susceptible to diversion to alternative delivery. Should the  
19 Commission decide to adopt the ECR coverage at the 228 percent level

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<sup>37</sup> USPS-T-30, pp. 34-36.

<sup>38</sup> *Id.*, pp. 34, 36.

1 proposed by the Postal Service, that makes it all the more necessary for the  
2 Commission to utilize a bottom up costing method which deliberately and  
3 thoughtfully sets mark-ups that do not excessively burden saturation mail.

#### 4 **Conclusion**

5 The Postal Service and the Postal Rate Commission have long been  
6 concerned about increases which depart so far from the average rate increase  
7 that they constitute "rate shock." This consideration presumably derives  
8 from 39 U.S.C. Section 3622(b)(4).

9 To the extent that one non-cost criterion applies to an individual rate  
10 category, it seems reasonable that all of the other criteria in Section 3622(b)  
11 should be reviewed to determine if they to are applicable. For example,  
12 fairness and equity, criterion 1, would appear to be as applicable as criterion  
13 4. This is because some mailers use one rate cell predominantly, or even  
14 exclusively. For this reason the Postal Rate Commission should also examine  
15 closely the contribution to overhead, in both absolute amount and percent,  
16 that is added to the volume-variable unit cost of each product, and extracted  
17 from mailers who use that product. The explicit development of bottom up  
18 costs for each rate cell provides basic data to facilitate such analysis.

## **1           V.    RATE DESIGN IN THE CONTEXT OF BOTTOM UP COSTS**

**2           As stated previously, estimated volume-variable unit costs for**  
**3   individual rate categories should be the same, regardless of whether derived**  
**4   from the top down or the bottom up. Interestingly, however, the same cannot**  
**5   be said when rates are designed from the bottom up versus the top down. At**  
**6   present, the two approaches as utilized by the Postal Service apply**  
**7   fundamentally different principles to rate design. As discussed below, the**  
**8   resulting rates can be and are often quite different.**

### **9    Bottom up Rate Design**

**10           When the Postal Service develops volume-variable unit costs using a**  
**11   bottom up approach — that is, by summing the mail processing, shipping and**  
**12   delivery unit costs applicable to each rate cell — volume-variable unit costs**  
**13   are the basis for developing rate elements in the rate schedule. Rate design**  
**14   adds a target percentage mark-up to the average volume-variable cost of each**  
**15   rate cell, with only secondary subsequent modifications. This procedure not**  
**16   only passes through all cost differences between rate cells to the rates derived**  
**17   from them, but also has the effect of increasing, or amplifying, those cost**

1 differences by the full amount of the contingency and the mark-up.<sup>39</sup> Thus,  
2 regardless of whether the difference in volume-variable cost is caused by  
3 sortation, transportation, shape, or weight, it is marked up.

4 For Priority Mail, witness Sharkey justifies this procedure on grounds  
5 that all volume-variable costs in each rate cell are marked up and, by  
6 inference, should be marked up.<sup>40</sup> To develop final proposed rates, the initial  
7 target rates are then tempered, or adjusted slightly, on the basis of various  
8 considerations.<sup>41</sup>

9 Top down rate design, by contrast, starts by developing an average  
10 rate for a group of rate categories. Then, through a series of discounts, often  
11 reflecting a dizzying array of passthroughs, the Postal Service proposes rates  
12 for individual categories.<sup>42</sup> Not only are volume-variable unit costs for  
13 individual rate categories not analyzed, **they are not even computed.**<sup>43</sup>

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<sup>39</sup> The same end result (*i.e.*, rate differences greater than cost differences) can be achieved by passthroughs that exceed 100 percent. Witness Moeller's proposed rate design includes several passthroughs greater than 100 percent. He denies, however, that they are based on a mark-up of the avoided costs. Response to VP-CW/USPS-T36-17 (Tr. 6/2908).

<sup>40</sup> Response of witness Sharkey to NDMS/USPS-T33-13 (Tr. 4/1961).

<sup>41</sup> Bottom up costs that have been marked up may be subject to adjustment and modification, as explained by witness Sharkey in response to UPS/USPS-T33-11 (Tr. 4/1992-95).

<sup>42</sup> The top down approach to rate design is depicted graphically in witness Moeller's response to NAA/USPS-T36-8 (Tr. 6/2782).

<sup>43</sup> Response of witness Moeller to PSA/USPS-T36-5 (Tr. 6/2883).



1     Instead, an initial rate is developed from costs averaged over all applicable  
2     rate cells.

3             One of the Commission's oft-stated goals is to develop and recommend  
4     cost-based rates. The most obvious and logical basis from which to develop  
5     cost-based rates is the volume-variable unit cost for each rate cell.<sup>44</sup> This is  
6     true regardless of whether unit costs for individual cells are developed from  
7     the top down or the bottom up.

8             Starting with the volume-variable unit cost for each rate cell, the  
9     Commission can recommend rates that, **on a consistent basis**, treat all  
10    subclasses fairly and equitably. At a minimum, the Commission should  
11    strive for rates that do not produce grossly inconsistent results between  
12    different rate categories and cells within subclasses. To that end, as an  
13    initial step, I therefore propose the following alternative approach to rate  
14    design for the Standard A ECR subclass in this docket:

- 15           (1)    Compute the average unit cost for each rate cell,
- 16           (2)    Establish an initial target rate for each rate cell based on  
17                   volume-variable unit cost plus a target mark-up, target margin,  
18                   or some combination of the two.
- 19           (3)    Adjust the initial target rates through a conscious balancing of  
20                   all applicable rate setting criteria contained in 39 U.S.C. Section  
21                   3622(b).

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<sup>44</sup>     It is of course assumed here that costs are properly measured and computed, as they should be, and that they correctly reflect volume-variable costs. To the extent that cost systems do not track costs properly, integrity of rate design is jeopardized.

1           Computation of an average unit cost for each rate cell is explained in  
2           section III of this testimony, *supra*. The other two steps are discussed below.

### 3           **Target Margins Versus Target Mark-Up**

4           Volume-variable unit cost reflects the extent to which mail in each rate  
5           category utilizes the facilities and transportation of the postal network. That  
6           is, a higher volume-variable cost generally reflects greater usage of and  
7           reliance on the network for sortation and shipping, as well as delivery to  
8           addressees. Using volume-variable unit cost as the basis for establishing  
9           cost-based rates, one approach would be (i) to compute the average amount  
10          required from each piece of mail to achieve the target contribution, and then  
11          (ii) add that amount to the volume-variable unit cost in each rate cell. An  
12          alternative approach would be to add a fixed percentage mark-up, or  
13          coverage, that is sufficient to recover the target contribution. The extent to  
14          which either of these two approaches is more appropriate for any given class  
15          or subclass depends on the competitive environment for postal services, as  
16          explained below.

17          **Target margin.** Establishing a fixed margin per piece of mail is one  
18          way to set initial target rates.<sup>45</sup> By adding a constant amount, this approach  
19          maintains rate differentials equal to cost differentials, but does not enlarge  
20          the differential. That is, rate differences reflect cost differences, and no

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<sup>45</sup> For ECR letters, the average margin is 8.2 cents per piece; for nonletters, it is 8.3 cents.

15           **Target mark-up.** Adding a percentage mark-up to volume-variable  
16           cost is the procedure used to set initial postal rates in some subclasses, such  
17           as Priority Mail.<sup>48</sup> Because costs are increased by a percentage amount, rate

47 That is, the same margin is extracted regardless of cost. Hence, it is reasonable to presume that the margin is imposed on final delivery, the one function that is common to all mail in the subclass.

48 As noted previously, the procedure of adding a percentage mark-up is (continued...)

1      differentials exceed cost differentials.<sup>49</sup> The resulting rates are typically  
 2      identified with bottom up rate design. Within a subclass, rate categories  
 3      with comparatively low unit costs would pay a lower contribution to other  
 4      costs, and thus would stand to benefit from an approach that applies a  
 5      percentage mark-up to volume-variable unit costs.

6              This approach seeks to derive a contribution, or “operating profit” on  
 7      each function performed by the Postal Service, regardless of whether it is  
 8      mail processing, transportation or delivery.<sup>50</sup> Implicitly, it treats all postal  
 9      services as being subject to fair competition, and rejects the concept that  
 10     the Postal Service should price mail processing and transportation at (or very  
 11     near) marginal cost, while extracting virtually the entire contribution to  
 12     other costs from the delivery function in the form of a pure monopoly rent.  
 13     The degree to which the latter function approximates such a pure monopoly  
 14     is an issue which will be addressed presently.

15             To the extent that the mail processing and transportation portions of  
 16     the Postal Service’s network provide valuable services to those mailers that

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<sup>48</sup>(...continued)

also the starting point for setting initial target prices in many industries.

<sup>49</sup>      Priority Mail offers a good example. Under the Postal Service’s proposed rates, the margin on a 50-pound package ranges from \$13.85 to \$29.56, depending on the zone, or distance traveled.

<sup>50</sup>      In the case of ECR letters, under the Postal Service’s proposed rates the average mark-up on letters is 144 percent, and the average mark-up on nonletters is 120 percent; see Table 3, *supra*.

1     utilize them, a mark-up that is fair to private providers of those services,  
2     added to on the cost of performing these functions, would be appropriate.  
3     Using this approach, generally higher target rates than those proposed by  
4     the Postal Service would be justified for the Automation and Basic presort  
5     rate categories. Target rates for High-Density and Saturation mail would be  
6     correspondingly lower.

### 7     **Assessing the Competitive Environment**

8             The two approaches described here can be viewed as representing  
9     somewhat extreme economic assumptions as regards the competitive  
10    environment for the provision of postal services. For any subclass, the  
11    question of which approach is more appropriate turns on the situation in  
12    which the Postal Service finds itself. Furthermore, the choice is not  
13    restricted to one or the other. The two approaches described here can be  
14    combined in a variety of ways. For example, should each approach be  
15    deemed equally applicable, half the desired contribution could be recouped  
16    via a fixed amount per piece, and the other half could be recouped by adding  
17    a mark-up equal to half the target mark-up to volume-variable unit cost.

18            **Competitive environment for delivery of advertising mail.** For  
19    advertising material such as Standard A ECR Mail, the Postal Service is the  
20    dominant provider of hard-copy delivery service. At the same time,  
21    newspaper inserts are a widely used method of distributing catalogs and

1 other advertising material, and alternative delivery services exist in some  
2 parts of the country.<sup>51</sup> The Postal Service's statutory monopoly precludes  
3 competitors' access to mailboxes, but to assume that the Postal Service has a  
4 monopoly on the delivery of all advertising material would appear  
5 presumptuous. A rate design that imposes on the delivery function the entire  
6 contribution to other, non-volume-variable costs clearly represents an  
7 extreme example of monopoly pricing. From an economic perspective, the  
8 result is a very high monopoly rent for delivery. Over the long run, a  
9 predictable effect of such monopoly pricing will be to encourage new entry  
10 and competition in the provision of delivery service.

11 **Competitive environment for sorting and shipping advertising**  
12 **mail.** In some respects the environment for sortation is highly competitive,  
13 but considerably less so in other respects. Competition comes solely from  
14 mailer presortation, which is quite common, and typically is referred to as  
15 worksharing.<sup>52</sup>

16 The situation with respect to shipping is similar. When advertising  
17 mailings are sufficiently large to fill one or more trucks, private

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<sup>51</sup> The Postal Service commissioned a wide-ranging confidential study on alternative delivery by Strategic Analysis, Inc. See Presiding Officer's Ruling No. R97-1/46. If the Postal Service had a complete monopoly on delivery, it would have no need for such a study, nor would it be sensitive about release of the contents.

<sup>52</sup> From an economic perspective, presortation is a substitute for, and thus competes with, sortation by the Postal Service.

1 transportation is usually provided or arranged by the preparer.<sup>53</sup> Like  
2 presortation, dropshipment to destinating postal facilities is quite common,  
3 and is also referred to appropriately as worksharing.

4 The bulk mail advertising industry noticeably lacks an infrastructure  
5 of independent intermediate consolidators (*i.e.*, firms that transport and  
6 merge advertising mail, and provide it to delivery firms, including – but not  
7 limited to – the Postal Service, in a highly presorted condition).<sup>54</sup>

8 Consolidators that collect, aggregate, sort and transport advertising material  
9 from different preparers of bulk mail scarcely exist. The principal  
10 consolidator by far is the Postal Service itself. To the extent that an  
11 advertising mailer requires the services of a consolidator, the Postal Service  
12 thus currently enjoys something close to a monopoly position.

13 To illustrate, within the ECR subclass, Saturation mail can be taken  
14 directly to the delivery route without any further sortation. By contrast, for  
15 any other ECR mail that only meets the basic requirement of 10 or more  
16 pieces per route, carriers must merge it with other mail prior to delivery.  
17 Hence, even this mail requires some “consolidation,” and that service is  
18 available only from the Postal Service itself. Similarly, smaller ECR

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<sup>53</sup> The preparer may be the mailer itself, or a letter shop that serves many clients.

<sup>54</sup> Independent presort houses exist for First-Class Mail, but not for advertising mail.

1 mailings that barely meet the minimum requirement of 10 pieces per carrier  
2 route may find that dropshipment is not an economically feasible alternative,  
3 given the lack of shipping consolidators for advertising mail.<sup>55</sup>

4 **Balancing Applicable Criteria of Section 3622(b)**

5 On prior occasions, the Commission has explicitly resisted the idea  
6 that the criteria in 39 U.S.C. Section 3622(b) should be applied  
7 systematically to the design of rates within a subclass.<sup>56</sup> The Commission is  
8 requested to reconsider its position on this issue. Regardless of the  
9 Commission's stated position, consideration and balancing of the different  
10 criteria in Section 3622(b) clearly underlie the rates proposed by the Postal  
11 Service for each rate cell, or rate category, of Standard A mail. The real issue  
12 is whether the criteria of Section 3622(b) will be invoked on an *ad hoc* basis  
13 to rationalize and justify any result which the Postal Service deems desirable  
14 at a particular time, or whether the criteria will be applied openly in a  
15 manner that is even-handed and over time becomes reasonably predictable.

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<sup>55</sup> Commercial letter shops that prepare and dropship large Saturation mailing occasionally may be able to piggyback smaller mailings onto their larger mailings.

<sup>56</sup> See, e.g., *Op. & Rec. Dec.*, Docket No. R87-1, pp. 458-59.



## VI. PROPOSED RATES

My proposed rates for ECR letters are shown in Table 6. They have been designed to provide the same revenues and contribution to institutional costs as the rates proposed by witness Moeller; *see* Appendix C for details. As indicated previously, rates proposed by witness Moeller would impose a higher implicit mark-up on letters than on nonletters (Table 3). Although the reasons for this higher mark-up on letters are not altogether clear, the rates proposed here have been designed so that letters and nonletters each produce essentially the same revenues as under the Postal Service proposal; *i.e.*, no revenue burden is shifted from letters to nonletters, or vice-versa. The principles adopted and the rationale underlying the rates proposed for letters and nonletters are explained below.

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Table 6

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**VP-CW Proposed  
Enhanced Carrier Route Rates  
(in dollars)**

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22

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24

25

**Letters**

Basic

Automation

High-Density

Saturation

**Nonletters (piece-rated)**

Basic

High-Density

Saturation

**Nonletters (pound-rated)**

Per Piece:

Basic

High-Density

Saturation

Per Pound:

Basic

High-Density

Saturation

No Destination  
Entry

BMC

SCF

DDU

0.167

0.160

0.142

0.129

0.167

0.150

0.138

0.058

0.041

0.029

0.530

0.530

0.530

0.152

0.145

0.127

0.114

0.152

0.135

0.123

0.458

0.458

0.458

0.149

0.142

0.124

0.111

0.149

0.132

0.120

0.442

0.442

0.442

0.144

0.137

0.119

0.106

0.144

0.127

0.115

0.420

0.420

0.420

1     **Destination Entry Discount**

2             Rate differentials for dropshipment and destination entry are identical  
3     to those proposed by the Postal Service. Costs avoided from destination entry  
4     are computed on a per-pound basis.<sup>57</sup> Witness Moeller proposes an 80  
5     percent passthrough of avoided costs, with the following proviso: for all  
6     pieces that weigh less than the breakpoint (3.3 ounces), the discount is  
7     computed at the breakpoint. Given the nature of the rate structure for  
8     Standard A Mail, the rate differences advocated by witness Moeller for  
9     destination entry seem fair and reasonable, and are adopted here.

10    **Letter Rates**

11            The starting point for rate development is the bottom up costs,  
12    including the 1 percent contingency, shown in Table 1. These costs reflect  
13    the full cost of sortation (otherwise referred to as presort savings), and were  
14    used to develop letter rates as follows.

15            First, initial "target rates" were derived by adding to unit costs a  
16    constant amount of 7.379 cents,<sup>58</sup> plus a mark-up of 10 percent. The 10  
17    percent mark-up is a conservative recognition of the fact that the Postal  
18    Service faces competition from alternate delivery in a number of markets. At

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<sup>57</sup>       USPS-LR-H-111.

<sup>58</sup>       This represents 90 percent of the average margin per piece (8.199 cents).

1 the same time, most of the contribution to overhead costs is put on the  
2 delivery function, consistent with the fact that the Postal Service is the  
3 dominant provider of hard-copy advertising delivery service, and with respect  
4 to hard-copy advertising the Postal Service exercises a substantial degree of  
5 monopoly power as regards the delivery function.

6 Second, these initial "target rates" are adjusted to reflect the  
7 differential for destination entry; *i.e.*, the Postal Service's rate differentials  
8 for dropshipment, as explained previously. Revenues from these adjusted  
9 rates are then compared with target revenues that result from the Postal  
10 Service proposal, and a final per-piece adjustment is made.<sup>59</sup> These are the  
11 ECR letter rates in Table 6.

12 Subtracting units costs (Table 1) from the proposed rates gives  
13 margins and mark-ups for letters, which are shown in Table 7. In absolute  
14 amount, Basic letters pay slightly more than the other rate categories. As a  
15 percentage of cost, however, the contribution made by Basic letters is lower  
16 than that of any other rate category.

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<sup>59</sup> The adjustment amounts to 0.26 cents per piece; *see* Appendix C, Table C-3, for details.

Table 7

**Margins and Mark-ups From  
VP-CW Proposed ECR Letter Rates**

**A. MARGINS  
(cents)**

6		No Destination	- Entry at Destinating -		
7		Entry	DBMC	DSCF	DDU
8	Automation	9.3	8.0	8.0	7.6
9	Basic	9.4	8.1	8.0	7.7
10	High-Density	8.9	7.8	7.7	7.5
11	Saturation	8.7	7.6	7.4	7.1

**B. MARK-UPS**

13		No Destination	- Entry at Destinating -		
14		Entry	DBMC	DSCF	DDU
15	Automation	138%	124%	128%	125%
16	Basic	128%	115%	117%	115%
17	High-Density	169%	159%	164%	168%
18	Saturation	104%	200%	199%	201%

1     **Nonletters**

2             Since the weight-cost relationship is not known with any degree of  
3     certainty, it was decided to adopt the Postal Service's proposed rate of \$0.53  
4     per pound for pieces that weigh in excess of the breakpoint.

5             Designing nonletter rates in a manner analogous to letters would  
6     require that each presort category reflect 100 percent of the cost difference  
7     for sortation plus an additional amount for institutional costs. The  
8     contribution to overhead costs would be a constant amount plus, perhaps, a  
9     small percentage mark-up (similar to that for letters). Following that  
10    procedure would result, however, in increasing the nonletter Basic rate well  
11    beyond the rate proposed by the Postal Service, and also well beyond the  
12    Basic rate for letters.

13            The effect of proposed rates on mailers (*i.e.*, possible "rate shock") is  
14    one criterion of the Act. Also, in its rate design, the Postal Service  
15    constrained the rate for Basic letters and nonletters to be equal. In light of  
16    these considerations, the indicated rate differences were reduced below the  
17    cost differences. The presort rate differences in Table 6 reflect 60 percent of  
18    the presort cost differences; *i.e.*, only 60 percent of the cost of sortation is  
19    passed through in the rates.<sup>60</sup>

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<sup>60</sup>     The presort cost differences passed through by witness Moeller were 39 percent between Basic and High-Density and 72 percent between High-Density and Saturation. USPS-T-36, p. 29

1           Within the context of bottom up rate design, the difference between  
 2           the cost and proposed rate for Basic nonletters can be viewed in either of two  
 3           ways:

- 4           •     Basic nonletters make the same contribution to overhead for  
 5                 delivery service (the monopoly function) as do Saturation and  
 6                 High-Density letters, but they receive sortation services from  
 7                 the Postal Service at only 60 percent of cost; or, alternatively,
- 8           •     Basic nonletters pay 100 percent of the cost of sortation services  
 9                 which they receive, but for delivery service (the monopoly  
 10                function) they pay a lower contribution to overhead than do  
 11                Saturation and High-Density letters.<sup>61</sup>

12           From the perspective of bottom up rate design, the Postal Service  
 13           appears to use its monopoly over the delivery function to price sortation  
 14           services below cost to Basic nonletters. At a minimum, the Postal Service  
 15           needs to articulate why Basic nonletters should pay less than volume-  
 16           variable cost for sortation services, or, in the alternative, pay a contribution  
 17           to overhead that is lower in absolute amount than the contribution paid by  
 18           High-Density and Saturation nonletters.

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<sup>61</sup>     Developing postal rates within the context of bottom up costs facilitates analogy with unbundled telephone rates. Local carriers are considered to have an effective monopoly over access, and they charge all long-distance carriers an equal amount (about 4 cents per call) for access. Interestingly, local carriers have not been permitted to enter the competitive long-distance business for fear that they would (i) find a way to charge themselves less for access than they charge independent competitors, or alternatively, (ii) they would sell competitive long-distance services below cost in order to obtain the monopolistically-set access rate.

1                   **VII. CONCLUSIONS AND RECOMMENDATIONS**

2                   The Commission is urged not only to recommend the Standard A ECR  
3 rates proposed here, but also to utilize the bottom up approach to cost  
4 development and rate design for ECR. This approach is generally consistent  
5 with the printing industry, which is a major provider of mail to the Postal  
6 Service, as well as many other industries. The explicit development of unit  
7 costs, margins and mark-ups for each rate category within a subclass helps  
8 assure that each rate will be cost-based and, at the same time, be consistent  
9 with all the statutory criteria of the Act.



## **Appendix A**

### **DEVELOPMENT OF UNIT COSTS FOR STANDARD A ECR MAIL**

**This appendix contains data to support my development of unit costs for Standard A ECR mail in Section III of my testimony. It contains 25 tables, as follows:**

#### **Table**

- A-1 Test Year Unit Costs**
- A-2 TYAR Total Cost of Letters and Nonletters**
- A-3 1996 Base Year Volume**
- A-4 1996 Base Year Weight**
- A-5 1996 Base Year Average Weight**
- A-6 1998 TYAR Volume**
- A-7 1998 TYAR Weight**
- A-8 Shipping Costs Incurred on Account of Non-Destination Entry**
- A-9 Total Shipping Costs Incurred on Account of Non-Destination Entry, TYAR**
- A-10 Unit Shipping Costs Incurred on Account of Non-Destination Entry, TYAR**
- A-11 Unadjusted TYAR Total Unit Cost (T+MP+D)**
- A-12 Unadjusted TYAR Total Cost**

- A-13 Adjusted TYAR Total Unit Cost
- A-14 TYAR Unit Cost Less 2.33 Cents Per Piece (Case I)
- A-15 TYAR Adjustment Factors (Case I)
- A-16 TYAR Unit Cost Including Weight-Related Adjustment (Case I)
- A-17 TYAR Final Unit Cost Adjustment to CRA (Case I)
- A-18 TYAR Final Adjusted Unit Costs (Case I)
- A-19 TYAR Total Adjusted Costs (Without Contingency) (Case I)
- A-20 TYAR Unit Cost Less 0.5825 Cents Per Piece (Case II)
- A-21 TYAR Adjustment Factors (Case II)
- A-22 TYAR Unit Cost Including Weight-Related Adjustment (Case II)
- A-23 TYAR Final Unit Cost Adjustment to CRA (Case II)
- A-24 TYAR Final Adjusted Unit Costs (Case II)
- A-25 TYAR Total Adjusted Costs (Without Contingency) (Case II)

## **Basic Data**

**Table A-1: Mail Processing and Delivery Unit Costs.** Data from various USPS sources were used to develop unit costs for mail processing, transportation (and other costs), and delivery, for letters and nonletters.

**Table A-2: TYAR Total Cost of Letters and Nonletters.** Unit costs in Table A-1 are multiplied by the TYAR volume projection in USPS-6A, Table 4, to

obtain total CRA costs **before contingency**, which comports with CRA costs **before contingency** from Exhibit USPS-15I.

**Tables A-3 and A-4: 1996 Base Year Volume and Weight.** Volumes (Table A-3) and weight (Table A-4), are taken directly from 1996 Billing Determinants, USPS-LR-H-145.

**Table A-5: 1996 Base Year Average Weight.** Dividing weight (Table A-4) by volume (Table A-3) produces average weight.

**Tables A-6 and A-7: TYAR Volume and Weight.** TYAR volume (Table A-6) and data for pound-rated pieces (Table A-7) are from USPS-T-36, WP 1, page 20. For letters and piece-rated nonletters, total weight is derived by multiplying the average base year weights (Table A-5) by the respective TYAR volumes (Table A-6).

**Table A-8: Shipping Costs Incurred on Account of Non-Destination Entry.** Data in Table A-8 come directly from USPS-LR-H-111.

**Tables A-9 and A-10: Total and Unit TYAR Shipping Costs Incurred on Account of Non-Destination Entry.** TYAR pounds (Table A-7) are multiplied by the per-pound shipping costs (Table A-8) to calculate the total shipping costs

incurred (Table A-9). Dividing total costs (Table A-9) by TYAR volumes (Table A-6) gives unit shipping costs (Table A-10).

#### **Unit Costs for ECR Letters**

**Tables A-11 and A-12: Unadjusted TYAR Total Unit Cost and Unadjusted TYAR Total Cost.** The sum of mail processing and delivery costs (Table A-1), plus shipping costs (Table A-10) results in **unadjusted** total unit costs (Table A-11). Multiplying unit costs (Table A-11) by TYAR volumes (Table A-6) gives an **unadjusted** total cost of \$467,088,000. Subtracting this from the CRA After Rates Total Cost for Letters, \$491,042,000 (Table A-2) results in a difference of \$23,954,000. Dividing this \$23,954,000 difference by total TYAR letter volume of 8,712,800,000 (Table A-6), gives a per-piece adjustment of 0.2749 cents.

**Table A-13: Adjusted TYAR Unit Costs.** Adding the per-piece adjustment of 0.2749 cents (Table A-12) to **unadjusted** unit costs (Table A-11) gives the **adjusted** unit costs for Standard A Regular Rate ECR Letters shown in Table A-13.

#### **Unit Costs for ECR Nonletters**

**Tables A-14 and A-20: TYAR Unit Cost Less 2.33 Cents Per Piece (Table A-14) and 0.5825 Cents Per Piece (Table A-20).** Unit mail processing and delivery costs (Table A-1, columns 1 and 2) together with unit

shipping costs (Table A-10), less **2.33 cents per piece**, gives the piece-rated unit costs and pound-rated per piece costs for Case I shown in Table A-14.

Using the same methodology, less **0.5825 cents per piece**, gives the piece-rated unit cost and pound-rated per-piece costs for Case II shown in Table A-20. Pound-rated per pound costs are unadjusted and taken directly from Table A-8 in both Table A-14 and A-20.

**Tables A-15 and A-21: TYAR Adjustment Factors.** Table A-15 gives the adjustment factors used in Case I (2.33 cents per piece treated as weight-related cost).

Table A-21 gives the adjustment factors for Case II (0.5825 cents per piece treated as weight-related cost). Both tables take TYAR volume from Table A-6 and TYAR weights from Table A-7.

**Tables A-16 and A-22: TYAR Unit Cost Including Weight-Related Adjustment.** Adjusting the unit costs in Table A-14 by the adjustment factors in Table A-15 give the adjusted TYAR unit costs shown in Table A-16 for both piece-rated pieces and pound-rated pieces, using the Case I adjustment of 2.33 cents per piece as weight-related cost.

Similarly, adjusting the unit costs in Table A-20 by the adjustment factors given in Table A-21 provides the adjusted TYAR unit costs shown in Table A-22 for

both piece-rated and pound-rated pieces, using the Case II adjustment of 0.5825 cents per piece as weight-related cost.

**Tables A-17 and A-23: TYAR Final Unit Cost Adjustment to CRA.** Multiplying unit costs (Table A-16) by TYAR volumes (Table A-6) and TYAR weights (Table A-7) gives the initial total cost for nonletters under Case I. This total, \$1,354,722,000, varies from the CRA total for nonletters, \$1,375,673,000, (Table A-2) by \$20,951,000. The adjustment factors of \$0.0054 per pound and 0.0677 cents per piece, shown in Table A-23, are used to reconcile the Case I total cost for nonletters with the CRA total for nonletters.

Similarly, multiplying unit costs (Table A-22) by TYAR volumes (Table A-6) and TYAR weights (Table A-7) gives the initial total cost for nonletters for Case II. This total, \$1,356,123,000, varies from the CRA total for nonletters, \$1,375,673,000, (Table A-2) by \$19,550,000. The adjustment factors of \$0.0054 per pound and 0.0632 cents per piece, shown in Table A-23, are used to reconcile the Case I total cost for nonletters with the CRA total for nonletters.

**Tables A-18 and A-24: TYAR Adjusted Unit Costs Without and With Contingency.** Adding the adjustment factors of \$0.0054 per pound and 0.0677 cents per piece (Table A-17) to the **unadjusted** unit costs (Table A-16) gives **adjusted** TYAR unit costs without contingency for Case I, shown in Table A-18,

part A. Adding the 1 percent contingency factor gives the TYAR unit costs with contingency for Case I shown in Table A-18, part B.

Similarly, adding the adjustment factors of \$0.0050 per pound and 0.0632 cents per piece (Table A-22) to the **unadjusted** unit costs (Table A-23) gives the **adjusted** TYAR unit costs without contingency for Case II shown in Table A-24, part A. Adding the 1 percent contingency factor gives the TYAR unit costs with contingency for Case II shown in Table A-24, part B.

**Tables A-19 and A-25: TYAR Total Adjusted Costs.** As a final check, the per-piece and per-pound rates (Table A-18) are multiplied by TYAR volumes (Table A-6) and TYAR weights (Table A-7) to obtain the total TYAR costs for nonletters under Case I, as shown in Table A-19.

Similarly, for Case II, the adjusted total per-piece and per-pound rates (Table A-24) are multiplied by TYAR volumes (Table A-6) and weights (Table A-7) to obtain the total TYAR costs for nonletters, as shown in Table A-25.

**Table A-1****Standard A ECR Mail****Test Year Unit Costs  
(cents per piece)**

	<b>Mail Processing [1]</b>	<b>Delivery [2]</b>	<b>Transport. [3]</b>	<b>Other [4]</b>	<b>TOTAL</b>
<b>LETTERS</b>					
Auto	2.3891	3.3570	0.1877	0.4519	6.3857
Basic	1.9840	4.3670	0.1877	0.4519	6.9906
High-Density	0.3611	3.7590	0.1877	0.4519	4.7597
Saturation	0.3611	2.8520	0.1877	0.4519	3.8527
<b>NONLETTERS</b>					
Basic	2.3834	5.8490	0.1877	0.4519	8.8720
High-Density	0.2753	5.1570	0.1877	0.4519	6.0719
Saturation	0.2753	3.4960	0.1877	0.4519	4.4109

**Sources:**

[1] USPS-T-29 (Exhibit USPS-29D, revised 8/18/97) - ECR costs reflect current level of dropshipping.

[2] USPS-T-18.

[3] CRA AFTER Rates (AR) CS 14 costs/volume = (\$53,839)/(28,686,182).

[4] CRA After Rates (AR) Other = (Total cost CS3.1\*piggy - CS6&7\*piggy)  
CS14 costs/volume = (\$129,647/28,686,182).

**NOTE:** Based on witness Daniels' calculations (USPS 29C, pages 3 & 6).



**Table A-2****Standard A ECR Mail****TYAR Total Cost of Letters and Nonletters**

	Test Year After Rates Volume Forecast (000) [1]	Test Year Unit Costs (cents) [2]	TYAR Total Costs (000) [3]	TYAR Total Costs (000) with Contingency [4]
<b>LETTERS</b>				
Auto Basic	2,059,662	6.3857	\$ 131,524	
Basic	3,173,765	6.9906	\$ 221,866	
High-Density	392,986	4.7597	\$ 18,705	
Saturation	3,086,387	3.8527	\$ 118,910	
Subtotal - Letters			<u>\$ 491,006</u>	\$ 495,916
<b>NONLETTERS</b>				
Basic	10,660,705	8.8720	\$ 945,821	
High-Density	1,154,078	6.0719	\$ 70,075	
Saturation	8,158,599	4.4109	\$ 359,870	
Subtotal - Flats or Nonletters			<u>\$ 1,375,766</u>	\$ 1,389,524
<b>TOTAL</b>			<u><u>\$ 1,866,772</u></u>	<u><u>\$ 1,885,440</u></u>
<b>CRA COSTS [5]</b>			<u><u>\$ 1,866,715</u></u>	<u><u>\$ 1,885,382</u></u>

**Sources:**

[1] Exhibit USPS-6A, Table 4, page 9.

[2] Table A-1.

[5] Exhibit USPS-T-15i.

**Table A-3****Standard A ECR Mail****1996 Base Year Volume  
(pieces)**

	<b>No Dest. Entry</b>	<b>BMC</b>	<b>SCF</b>	<b>DDU</b>	<b>Total</b>
<b>LETTERS</b>					
Automation	336,502,422				336,502,422
Basic	2,262,380,553	3,812,854,698	3,310,581,219	278,005,401	9,663,821,871
High-Density	17,604,147	12,186,619	56,005,324	6,933,645	92,729,735
Saturation	362,745,749	172,470,941	1,517,097,795	380,384,383	2,432,698,868
Subtotal	2,979,232,871	3,997,512,258	4,883,684,338	665,323,429	12,525,752,896
<b>NONLETTERS</b>					
Piece-Rated					
Basic	498,545,928	1,257,928,932	2,368,814,695	136,795,553	4,262,085,108
High-Density	10,986,188	15,541,982	292,755,894	147,357,210	466,641,274
Saturation	310,552,624	257,481,767	2,072,397,579	3,025,912,800	5,666,344,770
Subtotal	820,084,740	1,530,952,681	4,733,968,168	3,310,065,563	10,395,071,152
Pound-Rated					
Basic	260,852,101	1,164,495,905	2,692,035,487	83,426,851	4,200,810,344
High-Density	4,753,608	2,622,482	130,260,726	148,915,734	286,552,550
Saturation	104,593,569	4,452,334	336,105,974	1,663,900,216	2,109,052,093
Subtotal	370,199,278	1,171,570,721	3,158,402,187	1,896,242,801	6,596,414,987
<b>TOTAL VOLUME</b>					<b>29,517,239,035</b>

Source: 1996 Billing Determinants, LR-H-145.

**Table A-4****Standard A ECR Mail****1996 Base Year Weight  
(pounds)**

	<b>No Dest. Entry</b>	<b>BMC</b>	<b>SCF</b>	<b>DDU</b>	<b>Total</b>
<b>LETTERS</b>					
Automation	17,119,401				17,119,401
Basic	104,880,958	310,813,167	192,178,644	8,436,165	616,308,934
High-Density	1,068,698	1,174,791	5,109,926	243,345	7,596,760
Saturation	18,747,235	9,755,931	104,539,955	22,471,632	155,514,753
Subtotal	141,816,292	321,743,889	301,828,525	31,151,142	796,539,848
<b>NONLETTERS</b>					
<b>Piece-Rated</b>					
Basic	51,818,732	169,216,938	305,960,835	14,628,446	541,624,951
High-D	1,139,460	1,738,115	37,266,159	15,468,259	55,611,993
Saturation	26,193,420	18,502,983	237,662,665	423,637,455	705,996,523
Subtotal	79,151,612	189,458,036	580,889,659	453,734,160	1,303,233,467
<b>Pound-Rated</b>					
Basic	79,184,436	346,823,089	866,322,625	28,388,379	1,320,718,529
High-D	1,346,976	633,829	38,784,108	48,573,948	89,338,861
Saturation	29,845,360	1,416,882	95,114,118	492,328,680	618,705,040
Subtotal	110,376,772	348,873,800	1,000,220,851	569,291,007	2,028,762,430
<b>TOTAL WEIGHT</b>					<b>4,128,535,745</b>

Source: 1996 Billing Determinants, LR-H-145.

**Table A-5****Standard A ECR Mail**

**1996 Base Year Average Weight  
(pounds per piece)**

	<b>No Dest. Entry</b>	<b>BMC</b>	<b>SCF</b>	<b>DDU</b>
<b>LETTERS</b>				
Automation	0.0509			
Basic	0.0464	0.0815	0.0580	0.0303
High-Density	0.0607	0.0964	0.0912	0.0351
Saturation	0.0517	0.0566	0.0689	0.0591
<b>NONLETTERS</b>				
Piece-Rated				
Basic	0.1039	0.1345	0.1292	0.1069
High-Density	0.1037	0.1118	0.1273	0.1050
Saturation	0.0843	0.0719	0.1147	0.1400
Pound-Rated				
Basic	0.3036	0.2978	0.3218	0.3403
High-Density	0.2834	0.2417	0.2977	0.3262
Saturation	0.2853	0.3182	0.2830	0.2959

Source: Computed - Table A-4/Table A-3.

**Table A-6****Standard A ECR Mail****1998 TYAR Volume  
(pieces)**

	<b>No Dest. Entry</b>	<b>BMC</b>	<b>SCF</b>	<b>DDU</b>	<b>Total</b>
<b>LETTERS</b>					
Automation	682,281,000	856,221,000	479,035,000	42,125,000	2,059,662,000
Basic	835,299,000	1,035,288,000	1,205,217,000	97,961,000	3,173,765,000
High-Density	106,048,962	38,040,000	248,831,000	66,038	392,986,000
Saturation	845,176,149	211,268,000	2,029,472,000	470,851	3,086,387,000
Subtotal	2,468,805,111	2,140,817,000	3,962,555,000	140,622,889	8,712,800,000
<b>NONLETTERS</b>					
Piece-Rated					
Basic	564,897,000	1,724,261,000	3,493,243,000	115,536,000	5,897,937,000
High-D	29,049,000	42,541,000	465,253,000	213,812,000	750,655,000
Saturation	281,107,000	285,819,000	2,229,350,000	3,097,689,000	5,893,965,000
Subtotal	875,053,000	2,052,621,000	6,187,846,000	3,427,037,000	12,542,557,000
Pound-Rated					
Basic	251,474,150	1,087,339,934	3,367,276,976	56,676,939	4,762,768,000
High-D	5,768,949	4,074,572	147,773,845	245,805,634	403,423,000
Saturation	50,048,411	5,661,585	388,837,658	1,820,086,346	2,264,634,000
Subtotal	307,291,511	1,097,076,092	3,903,888,479	2,122,568,919	7,430,825,000
Subtotal, NONLETTERS					19,973,382,000
<b>TOTAL VOLUME</b>					<b>28,686,182,000</b>

Source: Witness Moeller, USPS-T-36, WP 1, page 20.

**Table A-7****Standard A ECR Mail****1998 TYAR Weight  
(pounds)**

	<b>No Dest. Entry</b>	<b>BMC</b>	<b>SCF</b>	<b>DDU</b>	<b>Total</b>
<b>LETTERS [1]</b>					
Automation	31,629,641	69,796,722	27,807,896	1,278,297	130,512,556
Basic	38,723,352	84,393,759	69,962,630	2,972,659	196,052,400
High-Density	6,437,933	3,667,059	22,703,341	2,318	32,810,651
Saturation	43,679,949	11,950,512	139,846,562	27,816	195,504,840
<b>Subtotal</b>	<b>120,470,875</b>	<b>169,808,052</b>	<b>260,320,430</b>	<b>4,281,089</b>	<b>554,880,447</b>
<b>NONLETTERS</b>					
<b>Piece-Rated [1]</b>					
Basic	58,715,245	231,948,053	451,194,240	12,355,023	754,212,560
High-Density	3,012,890	4,757,511	59,224,059	22,444,096	89,438,556
Saturation	23,709,842	20,539,334	255,661,977	433,636,352	733,597,506
<b>Subtotal</b>	<b>85,437,977</b>	<b>257,244,898</b>	<b>766,080,275</b>	<b>468,435,471</b>	<b>1,577,248,622</b>
<b>Pound-Rated [2]</b>					
Basic	79,660,806	344,738,349	1,067,567,737	18,005,108	1,509,972,000
High-Density	1,949,739	1,367,604	49,733,368	82,722,289	135,773,000
Saturation	14,833,445	1,651,620	115,032,091	538,486,844	670,004,000
<b>Subtotal</b>	<b>96,443,990</b>	<b>347,757,573</b>	<b>1,232,333,196</b>	<b>639,214,241</b>	<b>2,315,749,000</b>
<b>Total Nonletters</b>	<b>181,881,967</b>	<b>605,002,471</b>	<b>1,998,413,471</b>	<b>1,107,699,712</b>	<b>3,892,997,622</b>
<b>TOTAL WEIGHT</b>	<b>302,352,842</b>	<b>774,810,524</b>	<b>2,258,733,901</b>	<b>1,111,980,801</b>	<b>4,447,878,068</b>

**Sources:**

[1] Test Year After Rates Volumes (Table A-6) multiplied by Base Year Weight/Piece, Table A-5.

[2] Pound-rated pieces: Moeller, WP 1, page 20.

**Table A-3**

**Standard A ECR Mail**

**Shipping Costs Incurred on Account of Non-Destination Entry  
(dollars per pound)**

<b>Point of Entry</b>	<b>Transpor- tation</b>	<b>Nontrans- portation</b>	<b>Total</b>
DDU	0	0	0
SCF	0.0202	0.0072	0.0274
BMC	0.0339	0.0136	0.0475
Other	0.1108	0.0271	0.1379

Source: LR-H-111.

**Table A-9****Standard A ECR Mail**

**Total Shipping Costs Incurred  
on Account of Non-Destination Entry, TYAR**

	<b>No Dest. Entry</b>	<b>BMC</b>	<b>SCF</b>	<b>DDU</b>	<b>Total</b>
	----	----	----	----	----
<b>LETTERS</b>					
Automation	4,361,727	3,315,344	761,989	0	8,439,061
Basic	5,339,950	4,008,704	1,917,108	0	11,265,762
High-Density	887,791	174,185	622,114	0	1,684,091
Saturation	6,023,465	567,649	3,832,059	0	10,423,173
	-----	-----	-----	-----	-----
Subtotal	16,612,934	4,750,538	6,371,281	0	31,812,086
<b>NONLETTERS</b>					
Piece-Rated					
Basic	8,096,832	11,017,533	12,363,572	0	31,477,937
High-D	415,478	225,982	1,622,851	0	2,264,310
Saturation	3,269,587	975,618	7,005,620	0	11,250,825
	-----	-----	-----	-----	-----
Subtotal	11,781,897	12,219,133	20,992,042	0	44,993,072
Pound-Rated					
Basic	10,985,225	16,375,072	29,253,366	0	56,613,663
High-D	268,869	64,961	1,362,788	0	1,696,618
Saturation	2,045,532	78,452	3,152,096	0	5,276,080
	-----	-----	-----	-----	-----
Subtotal	13,299,626	16,518,485	33,768,250	0	63,586,361
<b>TOTAL COST</b>					<b>140,391,519</b>

**Sources:**

[1] Test Year After Rates pounds, Table A-7.

[2] Shipping Costs per pound, Table A-8 ( total column).



**Table A-10****Standard A ECR Mail**

**Unit Shipping Costs Incurred  
on Account of Non-Destination Entry, TYAR  
(cents per piece)**

	<b>No Dest. Entry</b>	<b>BMC</b>	<b>SCF</b>	<b>DDU</b>
	<u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>
<b>LETTERS</b>				
Automation	0.6393	0.3872	0.1591	0.0000
Basic	0.6393	0.3872	0.1591	0.0000
High-Density	0.8372	0.4579	0.2500	0.0000
Saturation	0.7127	0.2687	0.1888	0.0000
<b>NONLETTERS</b>				
Piece-Rated				
Basic	1.4333	0.6390	0.3539	0.0000
High-Density	1.4303	0.5312	0.3488	0.0000
Saturation	1.1631	0.3413	0.3142	0.0000
Pound-Rated				
Basic	4.3683	1.5060	0.8688	0.0000
High-Density	4.6606	1.5943	0.9222	0.0000
Saturation	4.0871	1.3857	0.8106	0.0000

**Sources:**

[1] Test Year After Rates Shipping Costs, Table A-9.

[2] Test Year After Rates Volume, Table A-6.

**Table A-11**

**Standard A ECR Letters**

**Unadjusted TYAR Total Unit Cost (T+MP+D)  
(cents per piece)**

	<b>No Dest. Entry</b>	<b>BMC</b>	<b>SCF</b>	<b>DDU</b>
	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>
<b>Automation</b>	<b>6.3854</b>	<b>6.1333</b>	<b>5.9052</b>	<b>5.7461</b>
<b>Basic</b>	<b>6.9903</b>	<b>6.7382</b>	<b>6.5101</b>	<b>6.3510</b>
<b>High-Density</b>	<b>4.9573</b>	<b>4.5780</b>	<b>4.3701</b>	<b>4.1201</b>
<b>Saturation</b>	<b>3.9258</b>	<b>3.4818</b>	<b>3.4019</b>	<b>3.2131</b>

**Sources:**

**[1] Mail Processing Costs, Table A-1, column 1.**

**[2] Delivery Costs, Table A-1, column 2.**

**[3] Shipping Costs, Table A-10.**

**Table A-12****Standard A ECR Letters****Unadjusted TYAR Total Cost  
(\$,000)**

	<u>No Dest. Entry</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>	<u>TOTAL</u>
Automation	43,566	52,515	28,288	2,421	126,789
Basic	58,390	69,760	78,460	6,222	212,832
High-Density	5,257	1,741	10,874	3	17,876
Saturation	33,180	7,356	69,041	15	109,592
Subtotal	\$ 140,393	\$ 131,372	\$ 186,663	\$ 8,660	<u>\$ 467,088</u>
TARGET: CRA AFTER Rates Total Cost for Letters (Table A-2, Column 3)					<u>\$ 491,006</u>
Difference					\$ 23,918
Per Piece Adjustment = Difference/total Volume (cents)					0.2745

**Sources:**

[1] TYAR Volume (pieces), Table A-6.

[2] TYAR Total Unadjusted Unit Costs, Table A-11.

**Table A-13****Standard A ECR Letters**

**Adjusted TYAR Total Unit Cost**  
**(cents per piece)**

**A: WITHOUT CONTINGENCY**

	No Dest. Entry ----	BMC ----	SCF ----	DDU ----
Automation	6.6599	6.4078	6.1797	6.0206
Basic	7.2648	7.0127	6.7846	6.6255
High-Density	5.2318	4.8525	4.6446	4.3946
Saturation	4.2003	3.7563	3.6764	3.4876

**B: WITH CONTINGENCY**

	No Dest. Entry ----	BMC ----	SCF ----	DDU ----
Automation	6.7265	6.4719	6.2415	6.0808
Basic	7.3374	7.0828	6.8524	6.6918
High-Density	5.2841	4.9010	4.6911	4.4386
Saturation	4.2423	3.7939	3.7132	3.5225

**Sources:**

[1] TYAR Unadjusted Total Unit Costs, Table A-11.

[2] Per-piece adjustment, Table A-12.

**Table A-14****Standard A ECR Nonletters**

**TYAR Unit Cost Less 2.33 Cents Per Piece**  
**(Case I: 2.33 Cents per Piece Treated as Weight-Related Cost)**

	No Dest. Entry	BMC	SCF	DDU
<b>Piece-Rated, per piece (cents) [1]</b>				
Basic	7.3357	6.5414	6.2563	5.9024
High-Density	4.5326	3.6335	3.4511	3.1023
Saturation	2.6044	1.7826	1.7555	1.4413
<b>Pound-Rated, per piece (cents) [2]</b>				
Basic	5.9024	5.9024	5.9024	5.9024
High-Density	3.1023	3.1023	3.1023	3.1023
Saturation	1.4413	1.4413	1.4413	1.4413
<b>Pound-Rated, per pound (dollars) [3]</b>				
Basic	0.1379	0.0475	0.0274	0.0000
High-Density	0.1379	0.0475	0.0274	0.0000
Saturation	0.1379	0.0475	0.0274	0.0000

**Sources:**

- [1] Mail Processing and Delivery Costs, Table A-1, columns 1 & 2 plus shipping costs per piece, Table A-10, less 2.33 cents per piece considered pound-related weight cost adjustment.
- [2] Mail Processing and Delivery Costs, Table A-1, columns 1 & 2, less 2.33 cents per piece considered pound-related weight cost adjustment.
- [3] Shipping cost, dollars per pound, Table A-8.

**Table A-15**

**Standard A ECR Nonletters**

**TYAR Adjustment Factors**  
**(Case I: 2.33 Cents per Piece Treated as Weight-Related Cost)**

Piece-Rated total Volume (pieces) * 2.33 cents per peice	\$	465,380
Total Weight for NONLETTERS		3,908,681,279
Dollars per pound for adjustment	\$	0.1191
Total Piece-Rated pounds *.1191	\$	187,792
Total Pound-Rated pounds *.0748	\$	277,588
Piece-Rated adjustment, (cents)		1.4972
Pound-Rated adjustment, (dollars)	\$	0.1191

**Sources**

- [1] TYAR Volume (pieces), Table A-6.
- [2] TYAR Volume (weight), Table A-7.
- [3] NONLETTERS adjustment factor (2.33 cents), Table A-14.

**Table A-16****Standard A ECR Nonletters**

**TYAR Unit Cost Including Weight-Related Adjustment  
(Case 1: 2.33 Cents per Piece Treated as Weight-Related Cost)**

	<b>No Dest. Entry</b>	<b>BMC</b>	<b>SCF</b>	<b>DDU</b>
	----	----	----	----
<b>Piece-Rated, per piece (cents)</b>				
Basic	8.8330	8.0386	7.7536	7.3996
High-Density	6.0298	5.1307	4.9484	4.5995
Saturation	4.1017	3.2799	3.2528	2.9385
<b>Pound-Rated, per piece (cents)</b>				
Basic	5.9024	5.9024	5.9024	5.9024
High-Density	3.1023	3.1023	3.1023	3.1023
Saturation	1.4413	1.4413	1.4413	1.4413
<b>Pound-Rated, per pound (dollars)</b>				
Basic	0.2570	0.1666	0.1465	0.1191
High-Density	0.2570	0.1666	0.1465	0.1191
Saturation	0.2570	0.1666	0.1465	0.1191

**Sources:**

[1] Table A-14.

[2] Table A-15, adjustment.

**Table A-17**

**Standard A ECR Nonletters**

**TYAR Final Unit Cost Adjustment to CRA  
(\$,000)**

**(Case I: 2.33 Cents per Piece Treated as Weight-Related Cost)**

	<u>No Dest Entry</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>	<u>TOTAL</u>
<b>Piece-Rated (per piece)</b>					
Basic	49,897	138,607	270,851	8,549	467,904
High-Density	1,752	2,183	23,022	9,834	36,791
Saturation	11,530	9,375	72,516	91,027	184,447
Subtotal	63,179	150,164	366,389	109,410	\$ 689,142
<b>Pound-Rated (per piece)</b>					
Basic	14,843	64,179	198,750	3,345	281,118
High-Density	179	126	4,584	7,626	12,515
Saturation	721	82	5,604	26,233	32,640
Subtotal	15,743	64,387	208,939	37,204	\$ 326,273
<b>Pound-Rated (per pound)</b>					
Basic	20,470	57,421	156,361	2,144	236,396
High-Density	501	228	7,284	9,849	17,862
Saturation	3,812	275	16,848	64,114	85,049
Subtotal	24,783	57,924	180,494	76,107	\$ 339,307
<b>TOTAL [1]</b>					<u>\$ 1,354,722</u>
<b>TYAR CRA Total for NONLETTERS</b>					<u>\$ 1,375,766</u>
<b>Total Adjustment Required:</b>					\$ 21,044
					(1.53% of CRA)
<b>Adjustment per pound (dollars)</b>					\$ 0.0054
<b>Total Piece-Rated Add Back Adjustment</b>					\$ 8,526
<b>Piece-rated, per piece (cents)</b>					<u>0.0680</u>
<b>Per pound (dollars)</b>					<u>\$ 0.0054</u>

**Sources:**

[1] Table A-16.

[2] TYAR Volume (pieces), Table A-6.

[3] TYAR Volume (weight), Table A-7.



**Table A-18****Standard A ECR Nonletters**

**TYAR Final Adjusted Unit Costs**  
**(Case I: 2.33 Cents per Piece Treated as Weight-Related Cost)**

**A: WITHOUT CONTINGENCY**

	No Dest. Entry	BMC	SCF	DDU
	—	—	—	—
<b>Piece-Rated, per piece (cents)</b>				
Basic	8.9009	8.1066	7.8215	7.4676
High-Density	6.0978	5.1987	5.0163	4.6675
Saturation	4.1696	3.3479	3.3208	3.0065
<b>Pound-Rated, per piece (cents)</b>				
Basic	5.9024	5.9024	5.9024	5.9024
High-Density	3.1023	3.1023	3.1023	3.1023
Saturation	1.4413	1.4413	1.4413	1.4413
<b>Pound-Rated, per pound (dollars)</b>				
Basic	0.2624	0.1720	0.1519	0.1245
High-Density	0.2624	0.1720	0.1519	0.1245
Saturation	0.2624	0.1720	0.1519	0.1245

**B: WITH CONTINGENCY**

<b>Piece-Rated, per piece (cents)</b>				
Basic	8.9900	8.1877	7.8998	7.5423
High-Density	6.1588	5.2507	5.0665	4.7142
Saturation	4.2113	3.3813	3.3540	3.0366
<b>Pound-Rated, per piece (cents)</b>				
Basic	5.9614	5.9614	5.9614	5.9614
High-Density	3.1333	3.1333	3.1333	3.1333
Saturation	1.4557	1.4557	1.4557	1.4557
<b>Pound-Rated, per pound (dollars)</b>				
Basic	0.2650	0.1737	0.1534	0.1257
High-Density	0.2650	0.1737	0.1534	0.1257
Saturation	0.2650	0.1737	0.1534	0.1257

**Sources:**

[1] Table A-16.

[2] Table A-17, per-piece adjustment (cents) & per-pound adjustment (dollars).

**Table A-19****Standard A ECR Nonletters**

**TYAR Total Adjusted Costs (Without Contingency)**  
**(Case I: 2.33 Cents per Piece Treated as Weight-Related Cost)**

	<b>No Dest. Entry</b>	<b>BMC</b>	<b>SCF</b>	<b>DDU</b>	<b>TOTAL</b>
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
<b>Piece-Rated</b>					
Basic	50,281	139,779	273,226	8,628	471,913
High-Density	1,771	2,212	23,339	9,980	37,301
Saturation	11,721	9,569	74,031	93,133	188,454
					<hr/>
<b>Subtotal</b>	<b>63,774</b>	<b>151,559</b>	<b>370,596</b>	<b>111,740</b>	<b>\$ 697,668</b>
					<hr/>
<b>Pound-Rated, per piece</b>					
Basic	14,843	64,179	198,750	3,345	281,118
High-Density	179	126	4,584	7,626	12,515
Saturation	721	82	5,604	26,233	32,640
					<hr/>
<b>Subtotal</b>	<b>15,743</b>	<b>64,387</b>	<b>208,939</b>	<b>37,204</b>	<b>\$ 326,273</b>
					<hr/>
<b>Pound-Rated, per pound</b>					
Basic	20,901	59,284	162,132	2,241	244,558
High-Density	512	235	7,553	10,296	18,596
Saturation	3,892	284	17,470	67,025	88,671
					<hr/>
<b>Subtotal</b>	<b>25,304</b>	<b>59,803</b>	<b>187,155</b>	<b>79,562</b>	<b>\$ 351,825</b>
					<hr/>
<b>TOTAL NONLETTERS</b>					<b>\$ 1,375,766</b>
					<hr/>

**Sources:**

- [1] TYAR Final Adjusted Unit Costs, Table A-18.
- [2] TYAR Volume (pieces), Table A-6.
- [3] TYAR Volume (weight), Table A-7.

**Table A-20****Standard A ECR Nonletters**

**TYAR Unit Cost Less 0.5825 Cents Per Piece**  
**(Case II: 0.5825 Cents per Piece Treated as Weight-Related Cost)**

	No Dest. Entry	BMC	SCF	DDU
<b>Piece-Rated, per piece (cents) [1]</b>				
Basic	9.0832	8.2889	8.0038	7.6499
High-Density	6.2801	5.3810	5.1986	4.8498
Saturation	4.3519	3.5301	3.5030	3.1888
<b>Pound-Rated, per piece (cents) [2]</b>				
Basic	7.6499	7.6499	7.6499	7.6499
High-Density	4.8498	4.8498	4.8498	4.8498
Saturation	3.1888	3.1888	3.1888	3.1888
<b>Pound-Rated, per pound (dollars) [3]</b>				
Basic	0.1379	0.0475	0.0274	0.0000
High-Density	0.1379	0.0475	0.0274	0.0000
Saturation	0.1379	0.0475	0.0274	0.0000

**Sources:**

- [1] Mail Processing and Delivery Costs, Table A-1, columns 1 & 2 plus shipping costs per piece, Table A-10, less 0.5825 cents per piece considered pound-related weight cost adjustment.
- [2] Mail Processing and Delivery Costs, Table A-1, columns 1 & 2, less 0.5825 cents per piece considered pound-related weight cost adjustment.
- [3] Shipping cost, dollars per pound, Table A-8.

**Table A-21**

**Standard A ECR Nonletters**

**TYAR Adjustment Factors  
(Case II: 0.5825 Cents per Piece Treated as Weight-Related Cost)**

Piece-Rated total Volume (pieces) * .5825 cents per peice	\$	116,345
Total Weight for NONLETTERS		3,908,681,279
Dollars per pound for adjustment	\$	0.0298
Total Piece-Rated pounds *.1191	\$	46,948
Total Pound-Rated pounds *.0748	\$	69,397
<b>Piece-Rated adjustment (cents)</b>		<b>0.3743</b>
<b>Pound-Rated adjustment (dollars)</b>	<b>\$</b>	<b>0.0298</b>

**Sources**

[1] TYAR Volume (pieces), Table A-6.

[2] TYAR Volume (weight), Table A-7.

[3] NONLETTERS adjustment factor (.5825 cents), Table A-20.

**Table A-22****Standard A ECR Nonletters**

**TYAR Unit Cost Including Weight-Related Adjustment  
(Case II: 0.5825 Cents per Piece Treated as Weight-Related Cost)**

	<b>No Dest. Entry</b>	<b>BMC</b>	<b>SCF</b>	<b>DDU</b>
	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>
<b>Piece-Rated, per piece (cents)</b>				
Basic	9.4575	8.6632	8.3781	8.0242
High-Density	6.6544	5.7553	5.5729	5.2241
Saturation	4.7262	3.9045	3.8774	3.5631
<b>Pound-Rated, per piece (cents)</b>				
Basic	7.6499	7.6499	7.6499	7.6499
High-Density	4.8498	4.8498	4.8498	4.8498
Saturation	3.1888	3.1888	3.1888	3.1888
<b>Pound-Rated, per pound (dollars)</b>				
Basic	0.1677	0.0773	0.0572	0.0298
High-Density	0.1677	0.0773	0.0572	0.0298
Saturation	0.1677	0.0773	0.0572	0.0298

**Sources:**

[1] Table A-20.

[2] Table A-21, adjustment.

**Table A-23**

**Standard A ECR Nonletters**

**TYAR Final Unit Cost Adjustment to CRA**

**(\$,000)**

**(Case II: 0.5825 Cents per Piece Treated as Weight-Related Cost)**

	<u>No Dest. Entry</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>	<u>TOTAL</u>
<b>Piece-Rated (per piece)</b>					
Basic	53,425	149,376	292,669	9,271	504,741
High-Density	1,933	2,448	25,928	11,170	41,479
Saturation	13,286	11,160	86,440	110,374	221,259
Subtotal	68,644	162,984	405,037	130,815	\$ 767,479
<b>Pound-Rated (per piece)</b>					
Basic	19,238	83,180	257,593	4,336	364,347
High-Density	280	198	7,167	11,921	19,565
Saturation	1,596	181	12,399	58,039	72,215
Subtotal	21,113	83,559	277,159	74,296	\$ 456,127
<b>Pound-Rated (per pound)</b>					
Basic	13,356	26,636	61,030	536	101,559
High-Density	327	106	2,843	2,462	5,738
Saturation	2,487	128	6,576	16,028	25,219
Subtotal	16,170	26,870	70,450	19,027	\$ 132,516
<b>TOTAL [1]</b>					<u>\$ 1,356,123</u>
<b>TYAR CRA Total for NONLETTERS</b>					<u>\$ 1,375,766</u>
<b>Total Adjustment Required:</b>					\$ 19,644
					(1.43% of CRA)
<b>Adjustment per pound (dollars)</b>					\$ 0.0050
<b>Total Piece-Rated Add Back Adjustment</b>					\$ 7,959
<b>Piece-rated, per piece (cents)</b>					<u>0.0635</u>
<b>Per pound (dollars)</b>					<u>\$ 0.0050</u>

**Sources:**

[1] Table A-22.

[2] TYAR Volume (pieces), Table A-6.

[3] TYAR Volume (weight), Table A-7.

**Table A-24****Standard A ECR Nonletters**

**TYAR Final Adjusted Unit Costs**  
**(Case II: 0.5825 Cents per Piece Treated as Weight-Related Cost)**

**A: WITHOUT CONTINGENCY**

	<b>No Dest. Entry</b>	<b>BMC</b>	<b>SCF</b>	<b>DDU</b>
	<u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>
<b>Piece-Rated, per piece (cents)</b>				
Basic	9.5210	8.7266	8.4416	8.0877
High-Density	6.7178	5.8188	5.6364	5.2876
Saturation	4.7897	3.9679	3.9408	3.6266
<b>Pound-Rated, per piece (cents)</b>				
Basic	7.6499	7.6499	7.6499	7.6499
High-Density	4.8498	4.8498	4.8498	4.8498
Saturation	3.1888	3.1888	3.1888	3.1888
<b>Pound-Rated, per pound (dollars)</b>				
Basic	0.1727	0.0823	0.0622	0.0348
High-Density	0.1727	0.0823	0.0622	0.0348
Saturation	0.1727	0.0823	0.0622	0.0348

**B: WITH CONTINGENCY**

<b>Piece-Rated, per piece (cents)</b>				
Basic	9.6162	8.8139	8.5260	8.1685
High-Density	6.7850	5.8770	5.6927	5.3404
Saturation	4.8376	4.0076	3.9802	3.6628
<b>Pound-Rated, per piece (cents)</b>				
Basic	7.7264	7.7264	7.7264	7.7264
High-Density	4.8983	4.8983	4.8983	4.8983
Saturation	3.2207	3.2207	3.2207	3.2207
<b>Pound-Rated, per pound (dollars)</b>				
Basic	0.1744	0.0831	0.0628	0.0352
High-Density	0.1744	0.0831	0.0628	0.0352
Saturation	0.1744	0.0831	0.0628	0.0352

**Sources:**

[1] Table A-22.

[2] Table A-23, per piece adjustment (cents) & per pound adjustment (dollars).

**Table A-25****Standard A ECR Nonletters**

**TYAR Total Adjusted Costs (Without Contingency)**  
**(Case II: 0.5825 Cents per Piece Treated as Weight-Related Cost)**

	<u>No Dest. Entry</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>	<u>TOTAL</u>
<b>Piece-Rated (per piece)</b>					
Basic	53,784	150,470	294,885	9,344	508,483
High-Density	1,951	2,475	26,223	11,305	41,956
Saturation	13,464	11,341	87,854	112,340	224,999
Subtotal	69,199	164,286	408,963	132,989	<u><b>\$ 775,438</b></u>
<b>Pound-Rated (per piece)</b>					
Basic	19,238	83,180	257,593	4,336	364,347
High-Density	280	198	7,167	11,921	19,565
Saturation	1,596	181	12,399	58,039	72,215
Subtotal	21,113	83,559	277,159	74,296	<u><b>\$ 456,127</b></u>
<b>Pound-Rated (per pound)</b>					
Basic	13,758	28,376	66,417	627	109,178
High-Density	337	113	3,094	2,880	6,423
Saturation	2,562	136	7,157	18,746	28,600
Subtotal	16,657	28,624	76,668	22,252	<u><b>\$ 144,201</b></u>
<b>TOTAL NONLETTERS</b>					<u><b>\$ 1,375,766</b></u>

**Sources:**

- [1] TYAR Final Adjusted Unit Costs, Table A-24.
- [2] TYAR Volume (pieces), Table A-6.
- [3] TYAR Volume (weight), Table A-7.



## **Appendix B**

### **MARGINS AND MARK-UPS FOR POSTAL SERVICE'S PROPOSED STANDARD A ECR RATES**

This appendix supports the analysis of the implied margins and mark-ups implicit in the Postal Service's proposed rates for Standard A ECR mail in Section IV of the testimony. It consists of seven tables:

#### **Table**

- B-1 Analysis of Postal Service Proposed Rates for ECR Letters**
- B-2 Analysis of Postal Service Proposed Rates for Piece-Rated ECR Nonletters (Case I)**
- B-3 Analysis of Postal Service Proposed Rates for 5.0 ounce Pound-Rated ECR Nonletters (Case I)**
- B-4 Analysis of Postal Service Proposed Rates for 10.0 ounce Pound-Rated ECR Nonletters (Case I)**
- B-5 Analysis of Postal Service Proposed Rates for Piece-Rated ECR Nonletters (Case II)**
- B-6 Analysis of Postal Service Proposed Rates for 5.0 ounce Pound-Rated ECR Nonletters (Case II)**
- B-7 Analysis of Postal Service Proposed Rates for 10.0 ounce Pound-Rated ECR Nonletters (Case II)**

#### **ECR Letters**

Witness Moeller's proposed rates for Standard A ECR letters are shown in part 1 of Table B-1. Part 2, immediately below, shows estimated

unit costs. The estimated margin, part 3, is the difference, between the proposed rates and estimated unit costs. Part 4 gives the estimated mark-up, which is the margin divided by estimated unit costs shown in part 2.

All subsequent tables in Appendix B use the same format and methodology for margins and mark-ups as Table B-1.

**ECR Nonletters Under Case I  
(2.33 Cents per Piece of Weight-Related Cost)**

Table B-2 analyzes the Postal Service's proposed rates for piece-rated nonletters using the estimated costs derived under Case I (Appendix A, Table A-18). Table B-3 does the same for a pound-rated nonletter which weighs 5.0 ounces, while Table B-4 analyzes the margins and mark-ups for a pound-rated nonletter which weighs 10.0 ounces. In each case, the methodology is the same as used in Table B-1.

**ECR Nonletters Under Case II  
(0.5825 Cents per Piece Treated as Weight-Related Cost)**

Table B-5 analyzes the Postal Service's proposed rates for piece-rated nonletters using the estimated costs derived under Case II (Appendix A, Table A-18). Table B-6 does the same for a pound-rated nonletter which weighs 5.0 ounces, while Table B-7 analyzes the margins and mark-ups for a pound-rated nonletter which weighs 10.0 ounces. In each case, the methodology is the same as used in Table B-1.

**Table B-1****Standard A ECR Mail****Analysis of Postal Service Proposed Rates  
for ECR Letters  
(cents)**

	<b>No Dest. Entry</b>	<b>BMC</b>	<b>SCF</b>	<b>DDU</b>
	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>Proposed Rates [1]</b>				
Automation	16.4	14.9	14.6	14.1
Basic	15.7	14.2	13.9	13.4
High-Density	14.3	12.8	12.5	12.0
Saturation	13.4	11.9	11.6	11.1
<b>Costs [2]</b>				
Automation	6.73	6.47	6.24	6.08
Basic	7.34	7.08	6.85	6.69
High-Density	5.28	4.90	4.69	4.44
Saturation	4.24	3.79	3.71	3.52
<b>Estimated Margin [3]</b>				
Automation	9.67	8.43	8.36	8.02
Basic	8.36	7.12	7.05	6.71
High-Density	9.02	7.90	7.81	7.56
Saturation	9.16	8.11	7.89	7.58
<b>Estimated Mark-up [4]</b>				
Automation	144%	130%	134%	132%
Basic	114%	100%	103%	100%
High-Density	171%	161%	166%	170%
Saturation	216%	214%	212%	215%

**Sources:**

[1] USPS-T-36, p. 31.

[2] Appendix A, Table A-13.

[3] Proposed rate - estimated cost.

[4] Margin/estimated cost.

**Table B-2****Standard A ECR Mail**

**Analysis of Postal Service Proposed Rates  
for Piece-Rated ECR Nonletters  
(Case I: 2.33 Cents per Piece Treated as Weight-Related Cost)  
(cents)**

	<b>No Dest. Entry</b>	<b>BMC</b>	<b>SCF</b>	<b>DDU</b>
<b>Proposed Rates [1]</b>				
<b>Piece-Rated</b>				
Basic	16.4	14.9	14.6	14.1
High-Density	15.3	13.8	13.5	13.0
Saturation	14.1	12.6	12.3	11.8
<b>Costs [2]</b>				
<b>Piece-Rated</b>				
Basic	8.99	8.19	7.90	7.54
High-Density	6.16	5.25	5.07	4.71
Saturation	4.21	3.38	3.35	3.04
<b>Margin [3]</b>				
<b>Piece-Rated</b>				
Basic	7.41	6.71	6.70	6.56
High-Density	9.14	8.55	8.43	8.29
Saturation	9.89	9.22	8.95	8.76
<b>Mark-up [4]</b>				
<b>Piece-Rated</b>				
Basic	82%	82%	85%	87%
High-Density	148%	163%	166%	176%
Saturation	235%	273%	267%	289%

**Sources:**

[1] USPS-T-36, p. 31.

[2] Appendix A, Table A-18.

[3] Proposed rate - estimated cost.

[4] Margin/estimated cost.

**Table B-3****Standard A ECR Mail**

**Analysis of Postal Service Proposed Rates  
for 5.0 ounce Pound-Rated ECR Nonletters  
(Case I: 2.33 Cents per Piece Treated as Weight-Related Cost)  
(cents)**

	<b>No Dest. Entry</b>	<b>BMC</b>	<b>SCF</b>	<b>DDU</b>
<b>Proposed Rates [1]</b>				
<b>Pound-Rated - Pieces</b>				
Basic	22.1	19.8	19.3	18.6
High-Density	21.0	18.7	18.2	17.5
Saturation	19.9	17.6	17.1	16.4
<b>Costs [2]</b>				
<b>Pound-Rated - Pieces</b>				
Basic	14.24	11.39	10.75	9.89
High-Density	11.41	8.56	7.93	7.06
Saturation	9.74	6.88	6.25	5.38
<b>Margin [3]</b>				
<b>Pound-Rated - Pieces</b>				
Basic	7.82	8.42	8.56	8.74
High-Density	9.55	10.15	10.29	10.46
Saturation	10.13	10.73	10.86	11.04
<b>Mark-up [4]</b>				
<b>Pound-Rated - Pieces</b>				
Basic	55%	74%	80%	88%
High-Density	84%	119%	130%	148%
Saturation	104%	156%	174%	205%

**Sources:**

[1] USPS-T-36, p. 31.

[2] Appendix, Table A-18.

[3] Proposed rate - estimated cost.

[4] Margin/estimated cost.

**Table B-4****Standard A ECR Mail**

**Analysis of Postal Service Proposed Rates  
for 10.0 ounce Pound-Rated ECR Nonletters  
(Case I: 2.33 Cents per Piece Treated as Weight-Related Cost)  
(cents)**

	<b>No Dest. Entry</b>	<b>BMC</b>	<b>SCF</b>	<b>DDU</b>
	<b>----</b>	<b>----</b>	<b>----</b>	<b>----</b>
<b>Proposed Rates [1]</b>				
<b>Pound-Rated - Pieces</b>				
Basic	38.6	34.1	33.1	31.8
High-Density	37.5	33.0	32.0	30.7
Saturation	36.4	31.9	30.9	29.6
<b>Costs [2]</b>				
<b>Pound-Rated - Pieces</b>				
Basic	22.52	16.82	15.55	13.82
High-Density	19.69	13.99	12.72	10.99
Saturation	18.02	12.31	11.04	9.31
<b>Margin [3]</b>				
<b>Pound-Rated - Pieces</b>				
Basic	16.10	17.31	17.58	17.93
High-Density	17.83	19.04	19.31	19.66
Saturation	18.41	19.62	19.88	20.24
<b>Mark-up [4]</b>				
<b>Pound-Rated - Pieces</b>				
Basic	71%	103%	113%	130%
High-Density	91%	136%	152%	179%
Saturation	102%	159%	180%	217%

**Sources:**

[1] USPS-T-36, p. 31.

[2] Appendix A, Table A-18.

[3] Proposed rate - estimated cost.

[4] Margin/estimated cost.

**Table B-5****Standard A ECR Mail**

**Analysis of Postal Service Proposed Rates  
for Piece-Rated ECR Nonletters  
(Case II: 0.5825 Cents per Piece Treated as Weight-Related Cost)  
(cents)**

	<b>No Dest. Entry</b>	<b>BMC</b>	<b>SCF</b>	<b>DDU</b>
	<b>----</b>	<b>----</b>	<b>----</b>	<b>----</b>
<b>Proposed Rates [1]</b>				
<b>Piece-Rated</b>				
Basic	16.4	14.9	14.6	14.1
High-Density	15.3	13.8	13.5	13.0
Saturation	14.1	12.6	12.3	11.8
<b>Costs [2]</b>				
<b>Piece-Rated</b>				
Basic	9.62	8.81	8.53	8.17
High-Density	6.78	5.88	5.69	5.34
Saturation	4.84	4.01	3.98	3.66
<b>Margin [3]</b>				
<b>Piece-Rated</b>				
Basic	6.78	6.09	6.07	5.93
High-Density	8.52	7.92	7.81	7.66
Saturation	9.26	8.59	8.32	8.14
<b>Mark-up [4]</b>				
<b>Piece-Rated</b>				
Basic	71%	69%	71%	73%
High-Density	126%	135%	137%	143%
Saturation	191%	214%	209%	222%

**Sources:**

[1] USPS-T-36, p. 31.

[2] Appendix A, Table A-24.

[3] Proposed rate - estimated cost.

[4] Margin/estimated cost.

**Table B-6****Standard A ECR Mail**

**Analysis of Postal Service Proposed Rates  
for 5.0 ounce Pound-Rated ECR Nonletters  
(Case II: 0.5825 Cents per Piece Treated as Weight-Related Cost)  
(cents)**

	<b>No Dest. Entry</b>	<b>BMC</b>	<b>SCF</b>	<b>DDU</b>
	<b>----</b>	<b>----</b>	<b>----</b>	<b>----</b>
<b>Proposed Rates [1]</b>				
<b>Pound-Rated - Pieces</b>				
Basic	22.1	19.8	19.3	18.6
High-Density	21.0	18.7	18.2	17.5
Saturation	19.9	17.6	17.1	16.4
<b>Costs [2]</b>				
<b>Pound-Rated - Pieces</b>				
Basic	13.18	10.32	9.69	8.82
High-Density	10.35	7.50	6.86	6.00
Saturation	8.67	5.82	5.18	4.32
<b>Margin [3]</b>				
<b>Pound-Rated - Pieces</b>				
Basic	8.89	9.49	9.62	9.80
High-Density	10.61	11.22	11.35	11.53
Saturation	11.19	11.79	11.93	12.11
<b>Mark-up [4]</b>				
<b>Pound-Rated - Pieces</b>				
Basic	67%	92%	99%	111%
High-Density	103%	150%	165%	192%
Saturation	129%	203%	230%	280%

**Sources:**

[1] USPS-T-36, p. 31.

[2] Appendix A, Table A-24.

[3] Proposed rate - estimated cost.

[4] Margin/estimated cost.



**Table B-7****Standard A ECR Mail**

**Analysis of Postal Service Proposed Rates  
for 10.0 ounce Pound-Rated ECR Nonletters  
(Case II: 0.5825 Cents per Piece Treated as Weight-Related Cost)  
(cents)**

	<b>No Dest. Entry</b>	<b>BMC</b>	<b>SCF</b>	<b>DDU</b>
<b>Proposed Rates [1]</b>				
<b>Pound-Rated - Pieces</b>				
Basic	38.6	34.1	33.1	31.8
High-Density	37.5	33.0	32.0	30.7
Saturation	36.4	31.9	30.9	29.6
<b>Costs [2]</b>				
<b>Pound-Rated - Pieces</b>				
Basic	18.63	12.92	11.65	9.92
High-Density	15.80	10.09	8.82	7.09
Saturation	14.12	8.42	7.15	5.42
<b>Margin [3]</b>				
<b>Pound-Rated - Pieces</b>				
Basic	20.00	21.20	21.47	21.83
High-Density	21.73	22.93	23.20	23.56
Saturation	22.30	23.51	23.78	24.13
<b>Mark-up [4]</b>				
<b>Pound-Rated - Pieces</b>				
Basic	107%	164%	184%	220%
High-Density	138%	227%	263%	332%
Saturation	158%	279%	333%	446%

**Sources:**

[1] USPS-T-36, p. 31.

[2] Appendix A, Table A-24.

[3] Proposed rate - estimated cost.

[4] Margin/estimated cost.

## **Appendix C**

### **DEVELOPMENT OF PROPOSED RATES**

***This appendix supports development of the rates proposed for Standard A ECR Mail in Section VI of my testimony. It consists of 12 tables:***

**Table**

- C-1 Standard A ECR Letters TYAR Total Unit Costs and Current Rates**
- C-2 Standard A ECR Letters Test Year Initial Target Rates**
- C-3 Standard A ECR Letters Development of VP-CW Proposed Rates**
- C-4 Standard A ECR Mail TYAR Volume**
- C-5 Standard A ECR Mail TYAR Weight**
- C-6 Standard A ECR Mail Postal Service Proposed Rates**
- C-7 Standard A ECR Nonletters Postal Service Proposed Rates  
TYAR Projected Revenues and Margins**
- C-8 Standard A ECR Nonletters TYAR Unit Costs with Contingency**
- C-9 Standard A ECR Nonletters TYAR Total Cost**
- C-10 Standard A ECR Nonletters VP-CW Proposed Rates**
- C-11 Standard A ECR Nonletters VP-CW Proposed Rates TYAR  
Projected Revenues and Margins**
- C-12 Standard A ECR Mail TYAR Projected Revenue**

## **VP-CW Proposed Rates for ECR Letters**

Tables C-1 through C-3 develop proposed rates for ECR letters.

**Table C-1: Standard A ECR Letters TYAR Total Unit Costs and Current Rates.** Parts A and B present the unit costs for ECR letters. Basic ECR letters have the highest unit cost. Using this cost as a baseline, part C shows the presort cost differentials for the other rate categories. Current ECR letter rates in part D are used for computations in Table C-3, Part H.

**Table C-2: Standard A ECR Letters Test Year Initial Target Rates.** Part A adds a constant amount of 8.1990 cents to unit costs with contingency (Table C-1), to produce revenues equal to those from the Postal Service's proposed rates. The constant amount is derived by dividing the total TYAR margin for letters, \$714,361,000 (Table 3), by the TYAR letter volume, 8,712,800,000 (Table A-6).

Part B multiplies unit costs with contingency (Table C-1) by 2.4405, the coverage necessary to provide revenues equal to those from the Postal Service's Proposed Rates. This coverage is the result of dividing the TYAR letter revenues, \$1,210,277,000 (Table C-12) by the TYAR letter costs, \$495,916,000 (Table A-2).

As explained in Section VI of my testimony, 90 percent of the constant amount in part A, together with 10 percent markup of unit costs, are used to derive VP-CW's proposed rates. This initial combination is shown in part C.

In part D, rates developed for BMC dropship were rounded. Shipping costs of 1.5 cents were added to develop rates in the No Destination Entry column. Rate differentials of 0.3 and 0.5 cents, respectively, were subtracted to develop the SCF and DDU rates. These are the initial adjusted rates.

**Table C-3: Standard A ECR Letters Development of VP-CW Proposed Rates.** This table is a continuation of Table C-2. Part E reproduces TYAR Volumes from Table A-6. These volumes multiplied by the initial adjusted rates (Table C-2, part D) result in TYAR initial projected revenues of \$1,232,978,439, as shown in part F. Subtracting target revenues for letters, \$1,210,277,000 (Table C-12) results in a difference from the initial rates of \$23,123,307, or 0.26 cents per piece. Adjusting initial rates by this amount results in the proposed rates for letters shown in part G.

The difference between proposed rates and the current rates (Table C-1, part D), stated as a percentage, is shown in part H. The presort discount from the Basic Rate is shown as the differential in part I.

Multiplying the final rates in part G by the TYAR volumes gives us the TYAR projected revenues of \$1,206,840,039, as shown in part J. This is a slight decrease of \$3,436,961, or 0.3 percent, from the Postal Service's proposed rates TYAR revenues of \$1,210,277,000.

## **VP-CW Proposed Rates for ECR Nonletters**

Tables C-4 through C-12 support development of VP-CW's proposed rates for ECR nonletters.

**Tables C-4 and C-5: Standard A ECR Mail TYAR Volume and Weight.** TYAR volumes and weight are directly from Tables A-6 and A-7, respectively.

**Table C-6: Standard A ECR Mail Postal Service Proposed Rates.**

**Table C-7: Standard A ECR Nonletters Postal Service Proposed Rates TYAR Projected Revenues and Margins.** Table C-7 gives the nonletter TYAR projected revenues, derived by multiplying the Postal Service's proposed rates (Table C-6) by the volumes (Table C-4) and weight (for pound-rated pieces). The margin or expected contribution (\$1,678,459,501), shown at the bottom of Table C-7, is obtained by subtracting TYAR total projected costs (Table C-9).

**Table C-8: Standard A ECR Nonletters TYAR Unit Costs with Contingency.** The unit costs shown in Table C-8 are directly from Appendix A, Table A-18 (B).

**Table C-9: Standard A ECR Nonletters TYAR Total Cost.** Multiplying the unit TYAR costs (Table C-8) by TYAR volumes (Table C-4) and weights (Table C-5) gives TYAR total projected costs.

**Table C-10: Standard A ECR Nonletters VP-CW Proposed Rates.**

**Table C-11: Standard A ECR Nonletters VP-CW Proposed Rates TYAR Projected Revenues and Margin.** Multiplying the VP-CW proposed rates (Table C-10) by the volumes (Table C-4) and weights (Table C-5) gives TYAR projected revenues. Deducting the total TYAR costs (Table C-9) leaves the margin, or expected contribution to institutional costs, of \$1,682,503,585, which is \$4,044,084 more than the contribution of \$1,678,459,501 developed from projections of the Postal Service's proposed rates.

**Table C-12: Standard A ECR Mail TYAR Projected Revenue.** Comparing the contributions projected by USPS and VP-CW proposed rates shows that the rates proposed by VP-CW provide a combined margin that is essentially equal but slightly more (by \$604,123) than the margin from rates proposed by the Postal Service.

	<b>USPS Proposed Rates</b>	<b>VP-CW Proposed Rates</b>	<b>Difference</b>
<b>LETTER MARGIN</b>	\$ 1,210,277,000	\$ 1,206,840,039	\$ -3,436,961
<b>NONLETTER MARGIN</b>	<u>1,678,459,501</u>	<u>1,682,503,585</u>	<u>4,044,084</u>
<b>TOTAL MARGIN</b>	<b>\$ 2,888,739,501</b>	<b>\$ 2,889,343,624</b>	<b>\$ 604,123</b>

**Table C-1**

**Standard A ECR Letters  
TYAR Total Unit Costs and Current Rates  
(cents per piece)**

**A: UNIT COSTS WITHOUT CONTINGENCY [1]**

	No Dest. Entry ---	BMC ---	SCF ---	DDU ---
Automation	6.6603	6.4082	6.1801	6.0210
Basic	7.2652	7.0131	6.7850	6.6259
High-D	5.2322	4.8529	4.6450	4.3950
Saturation	4.2007	3.7567	3.6768	3.4880

**B: UNIT COSTS WITH CONTINGENCY [1]**

	No Dest. Entry ---	BMC ---	SCF ---	DDU ---
Automation	6.7269	6.4723	6.2419	6.0812
Basic	7.3379	7.0833	6.8528	6.6922
High-D	5.2845	4.9015	4.6915	4.4390
Saturation	4.2427	3.7943	3.7136	3.5229

**C: PRESORT COST DIFFERENTIALS [1]**

	Entry ---	BMC ---	SCF ---	DDU ---
Automation	0.61	0.61	0.61	0.61
Basic	—	—	—	—
High-D	2.05	2.18	2.16	2.25
Saturation	3.10	3.29	3.14	3.17

**D: CURRENT RATES [2]**

	Entry ---	BMC ---	SCF ---	DDU ---
Automation	14.6	13.3	12.8	12.3
Basic	15.0	13.7	13.2	12.7
High-D	14.2	12.9	12.4	11.9
Saturation	13.3	12.0	11.5	11.0

**Sources:**

[1] Appendix A, Table A-13.

[2] Docket No. MC95-1, *Opinion and Recommended Decision*.

**Table C-2**

**Standard A ECR Letters  
Test Year Initial Target Rates  
(cents per piece)**

**A: WITH CONSTANT AMOUNT ADDED**

	Margin =	8.199		
	No Dest.			
	Entry	BMC	SCF	DDU
	----	----	----	----
Automation	14.9259	14.6713	14.4409	14.2802
Basic	15.5369	15.2823	15.0518	14.8912
High-D	13.4835	13.1005	12.8905	12.6380
Saturation	12.4417	11.9933	11.9126	11.7219

**B: WITH CONSTANT PERCENT APPLIED**

	Coverage =	2.4405		
	No Dest.			
	Entry	BMC	SCF	DDU
	----	----	----	----
Automation	16.4170	15.7957	15.2333	14.8413
Basic	17.9081	17.2867	16.7244	16.3323
High-D	12.8968	11.9620	11.4496	10.8333
Saturation	10.3544	9.2599	9.0631	8.5977

**C: 90% FIXED; 10% CONSTANT PERCENT**

	No Dest.			
	Entry	BMC	SCF	DDU
	----	----	----	----
Automation	15.0750	14.7838	14.5201	14.3363
Basic	15.7740	15.4827	15.2191	15.0353
High-D	13.4248	12.9866	12.7464	12.4575
Saturation	12.2330	11.7199	11.6277	11.4095

**D: ADJUSTED TO REFLECT DEST. ENTRY**

	No Dest.			
	Entry	BMC	SCF	DDU
	----	----	----	----
Automation	16.3	14.8	14.5	14.0
Basic	17.0	15.5	15.2	14.7
High-D	14.5	13.0	12.7	12.2
Saturation	13.2	11.7	11.4	10.9



Table C-3

**Standard A ECR Letters  
Development of VP-CW Proposed Rates**

**E: (TYAR Volume - Pieces)**

	No Dest. Entry	BMC	SCF	DDU	Total
LETTERS					
Automation	682,281,000	856,221,000	479,035,000	42,125,000	2,059,662,000
Basic	835,299,000	1,035,288,000	1,205,217,000	97,961,000	3,173,765,000
High-D	106,048,962	38,040,000	248,831,000	66,038	392,986,000
Saturation	845,176,149	211,268,000	2,029,472,000	470,851	3,086,387,000
	2,468,805,111	2,140,817,000	3,962,555,000	140,622,889	8,712,800,000

**F: INITIAL REVENUES**

LETTERS					
Automation	111,211,803	126,720,708	69,460,075	5,897,500	313,290,086
Basic	142,000,830	160,469,640	183,192,984	14,400,267	500,063,721
High-D	15,377,099	4,945,200	31,601,537	8,057	51,931,893
Saturation	111,563,252	24,718,356	231,359,808	51,323	367,692,738
Subtotal	380,152,984	316,853,904	515,614,404	20,357,146	1,232,978,439

Target Revenues from letters (Table C-12) 1,210,277,000  
Difference 22,701,439

Per piece difference 0.002605527

**G: FINAL ADJUSTED PROPOSED 90% FIXED, 10% PERCENTAGE RATES**

	No Dest. Entry	BMC	SCF	DDU
Automation	16.0	14.5	14.2	13.7
Basic	16.7	15.2	14.9	14.4
High-D	14.2	12.7	12.4	11.9
Saturation	12.9	11.4	11.1	10.6

**H: PERCENT CHANGE FROM CURRENT RATES**

Automation	9.6%	9.0%	10.9%	11.4%
Basic	11%	11%	13%	13%
High-D	0%	-2%	0%	0%
Saturation	-3%	-5%	-3%	-4%

**I: PRESORT DIFFERENTIAL**

Automation	0.7	0.7	0.7	0.7
Basic	-	-	-	-
High-D	2.5	2.5	2.5	2.5
Saturation	3.8	3.8	3.8	3.8

**J: INITIAL REVENUES**

LETTERS					
Automation	109,164,960	124,152,045	68,022,970	5,771,125	307,111,100
Basic	139,494,933	157,363,776	179,577,333	14,106,384	490,542,426
High-D	15,058,953	4,831,080	30,855,044	7,859	50,752,935
Saturation	109,027,723	24,084,552	225,271,392	49,910	358,433,577
Subtotal	372,746,569	310,431,453	503,726,739	19,935,278	1,206,840,039

**Table C-4**

**Standard A ECR Mail  
TYAR Volume  
(pieces)**

	<b>No Dest. Entry</b>	<b>BMC</b>	<b>SCF</b>	<b>DDU</b>	<b>Total</b>
<b>LETTERS</b>					
Automation	682,281,000	856,221,000	479,035,000	42,125,000	2,059,662,000
Basic	835,299,000	1,035,288,000	1,205,217,000	97,961,000	3,173,765,000
High-D	106,048,962	38,040,000	248,831,000	66,038	392,986,000
Saturation	845,176,149	211,268,000	2,029,472,000	470,851	3,086,387,000
Subtotal	2,468,805,111	2,140,817,000	3,962,555,000	140,622,889	8,712,800,000
<b>NONLETTERS</b>					
<b>Piece-Rated</b>					
Basic	564,897,000	1,724,261,000	3,493,243,000	115,536,000	5,897,937,000
High-D	29,049,000	42,541,000	465,253,000	213,812,000	750,655,000
Saturation	281,107,000	285,819,000	2,229,350,000	3,097,689,000	5,893,965,000
Subtotal	875,053,000	2,052,621,000	6,187,846,000	3,427,037,000	12,542,557,000
<b>Pound-Rated</b>					
Basic	251,474,150	1,087,339,934	3,367,276,976	56,676,939	4,762,768,000
High-D	5,768,949	4,074,572	147,773,845	245,805,634	403,423,000
Saturation	50,048,411	5,661,585	388,837,658	1,820,086,346	2,264,634,000
Subtotal	307,291,510	1,097,076,092	3,903,888,479	2,122,568,919	7,430,825,000
Subtotal, NONLETTERS					19,973,382,000
<b>TOTAL VOLUME</b>					<b>28,686,182,000</b>

Source:

[1] Appendix A, Table A-6.

**Table C-8**

**Standard A ECR Mail  
TYAR Weight  
(pounds)**

**LETTERS [1]**

Automation  
Basic  
High-D  
Saturation

Subtotal

**NONLETTERS**

Piece-Rated [1]  
Basic  
High-D  
Saturation

Subtotal	No Dest. Entry	BMC	SCF	DDU	
Pound-Rated [2]					
Basic	79,660,806	344,738,349	1,067,567,737	18,005,108	1,509,972,000
High-D	1,949,739	1,367,604	49,733,368	82,722,289	135,773,000
Saturation	14,833,445	1,651,620	115,032,091	538,486,844	670,004,000
Subtotal	96,443,990	347,757,573	1,232,333,196	639,214,241	2,315,749,000

**Source:**

[1] Appendix A, Table A-7.

**TABLE C-6**  
**Standard A ECR Mail**  
**Postal Service Proposed Rates**

	No Dest. Entry -----	BMC -----	SCF -----	DDU -----
<b>LETTERS [1]</b>				
Automation	0.157	0.142	0.139	0.134
Basic	0.164	0.149	0.146	0.141
High-D	0.143	0.128	0.125	0.120
Saturation	0.134	0.119	0.116	0.111
<b>NONLETTERS</b>				
Piece-Rated [1]				
Basic	0.164	0.149	0.146	0.141
High-D	0.153	0.138	0.135	0.130
Saturation	0.141	0.126	0.123	0.118
Pound-Rated [2]				
Basic	0.055	0.055	0.055	0.055
High-D	0.044	0.044	0.044	0.044
Saturation	0.032	0.032	0.032	0.032
Per pound				
Basic	0.530	0.458	0.442	0.420
High-D	0.530	0.458	0.442	0.420
Saturation	0.530	0.458	0.442	0.420

**Source:**

[1] USPS-T-36, p. 31.

**Table C-7**  
**Standard A ECR Nonletters**  
**Postal Service Proposed Rates**  
**TYAR Projected Revenues and Margins**

	<u>No Dest. Entry</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>	<u>Total</u>
<b>NONLETTERS</b>					
Piece-Rated					
Basic	92,643,108	256,914,889	510,013,478	16,290,576	875,862,051
High-D	4,444,497	5,870,658	62,809,155	27,795,560	100,919,870
Saturation	39,636,087	36,013,194	274,210,050	365,527,302	715,386,633
Subtotal	136,723,692	298,798,741	847,032,683	409,613,438	1,692,168,554
Pound-Rated					
Basic	13,831,078	59,803,696	185,200,234	3,117,232	261,952,240
High-D	253,834	179,281	6,502,049	10,815,448	17,750,612
Saturation	1,601,549	181,171	12,442,805	58,242,763	72,468,288
Subtotal	15,686,461	60,164,148	204,145,088	72,175,443	352,171,140
Per pound					
Basic	42,220,227	157,890,164	471,864,940	7,562,145	679,537,476
High-D	1,033,362	626,363	21,982,149	34,743,361	58,385,234
Saturation	7,861,726	756,442	50,844,184	226,164,474	285,626,827
Subtotal	51,115,315	159,272,968	544,691,273	268,469,981	1,023,549,537
<b>TOTAL (NOTE 1)</b>					<b>3,067,889,231</b>
<b>LESS COST:</b>					<b>1,389,523,907</b>
<b>MARGIN (CONTRIBUTION)</b>					<b>1,678,365,324</b>

NOTE 1: Difference between \$3,067,889,231 and \$3,052,241 in Table C-12 due to rounding in Table C-12.

**Sources:**

- [1] Table C-4 Volume.
- [2] Table C-5 Weight.
- [3] Table C-6 USPS Proposed Rates.

**Table C-8**  
**Standard A ECR Nonletters**  
**TYAR Unit Costs with Contingency**  
**(in dollars)**

	No Dest. Entry	BMC	SCF	DDU
<b>NONLETTERS</b>				
<b>Piece-Rated</b>				
Basic	0.0899	0.0819	0.0790	0.0754
High-D	0.0616	0.0525	0.0507	0.0471
Saturation	0.0421	0.0338	0.0335	0.0304
<b>Pound-Rated</b>				
Basic	0.0596	0.0596	0.0596	0.0596
High-D	0.0313	0.0313	0.0313	0.0313
Saturation	0.0146	0.0146	0.0146	0.0146
<b>Per pound</b>				
Basic	0.2650	0.1737	0.1534	0.1257
High-D	0.2650	0.1737	0.1534	0.1257
Saturation	0.2650	0.1737	0.1534	0.1257

**SOURCE:**

[1] Appendix A, Table A-18 (B).

**TABLE C-8**  
**Standard A ECR Nonletters**  
**TYAR Total Cost**

	<u>No Dest. Entry</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>	<u>Total</u>
<b>NONLETTERS</b>					
<b>Piece-Rated</b>					
Basic	50,783,985	141,176,516	275,957,812	8,714,063	476,632,375
High-D	1,789,058	2,233,706	23,571,997	10,079,507	37,674,267
Saturation	11,838,326	9,664,501	74,771,705	94,063,851	190,338,383
<b>Subtotal</b>	<b>64,411,369</b>	<b>153,074,723</b>	<b>374,301,513</b>	<b>112,857,421</b>	<b>704,645,026</b>
<b>Pound-Rated</b>					
Basic	14,991,440	64,820,944	200,737,658	3,378,753	283,928,795
High-D	180,760	127,670	4,630,232	7,701,884	12,640,546
Saturation	728,561	82,416	5,660,360	26,495,234	32,966,572
<b>Subtotal</b>	<b>15,900,761</b>	<b>65,031,030</b>	<b>211,028,250</b>	<b>37,575,871</b>	<b>329,535,912</b>
<b>Per pound</b>					
Basic	21,109,510	59,877,062	163,753,500	2,263,484	247,003,556
High-D	516,666	237,537	7,628,568	10,399,303	18,782,074
Saturation	3,930,751	286,867	17,644,695	67,695,027	89,557,340
<b>Subtotal</b>	<b>25,556,927</b>	<b>60,401,466</b>	<b>189,026,763</b>	<b>80,357,813</b>	<b>355,342,969</b>
<b>TOTAL</b>					<b><u>1,389,523,907</u></b>

**Sources:**

- [1] Table C-4 Volume.
- [2] Table C-5 Weight.
- [3] Table C-8 Unit Costs.

**TABLE C-10**

**Standard A ECR Nonletters  
VP-CW Proposed Rates  
(in dollars)**

<b>BASIC RATE</b>	<b>0.167</b>			
<b>Presort Discount for High-Density</b>	<b>0.017</b>			
<b>Presort Discount for Saturation</b>	<b>0.012</b>			
	<b>No Dest Entry</b>	<b>BMC</b>	<b>SCF</b>	<b>DDU</b>
	<b>----</b>	<b>----</b>	<b>----</b>	<b>----</b>
<b>NONLETTERS</b>				
<b>Piece-Rated</b>				
Basic	0.167	0.152	0.149	0.144
High-D	0.150	0.135	0.132	0.127
Saturation	0.138	0.123	0.120	0.115
<b>Pound-Rated</b>				
Basic	0.058	0.058	0.058	0.058
High-D	0.041	0.041	0.041	0.041
Saturation	0.029	0.029	0.029	0.029
<b>Per pound</b>				
Basic	0.530	0.458	0.442	0.420
High-D	0.530	0.458	0.442	0.420
Saturation	0.530	0.458	0.442	0.420



**Table C-11**  
**Standard A ECR Nonletters**  
**VP-CW Proposed Rates**  
**TYAR Projected Revenues and Margins**

	<u>No Dest. Entry</u>	<u>BMC</u>	<u>SCF</u>	<u>DDU</u>	<u>Total</u>
<b>NONLETTERS</b>					
Piece-Rated					
Basic	94,337,799	262,087,672	520,493,207	16,637,184	893,555,862
High-D	4,357,350	5,743,035	61,413,396	27,154,124	98,667,905
Saturation	38,792,766	35,155,737	267,522,000	356,234,235	697,704,738
Subtotal	137,487,915	302,986,444	849,428,603	400,025,543	1,689,928,505
Pound-Rated					
Basic	14,585,501	63,065,716	195,302,065	3,287,262	276,240,544
High-D	236,527	167,057	6,058,728	10,078,031	16,540,343
Saturation	1,451,404	164,186	11,276,292	52,782,504	65,674,386
Subtotal	16,273,432	63,396,960	212,637,084	66,147,797	358,455,273
Per pound					
Basic	42,220,227	157,890,164	471,864,940	7,562,145	679,537,476
High-D	1,033,362	626,363	21,982,149	34,743,361	58,385,234
Saturation	7,861,726	756,442	50,844,184	226,164,474	285,626,827
Subtotal	51,115,315	159,272,968	544,691,273	268,469,981	1,023,549,537
<b>TOTAL</b>					<b>3,071,933,315</b>
<b>LESS COST:</b>					<b>1,389,523,907</b>
<b>MARGIN (CONTRIBUTION)</b>					<b>1,682,409,408</b>

**Sources:**

- [1] Table C-4 Volume.
- [2] Table C-5 Weight.
- [3] Table C-10 VP-CW Proposed Rates.
- [4] Table C-9 Total Cost.

Table C-12

**Standard A ECR Mail  
TYAR Projected Revenue**

TY Revenue - After Rates Enhanced Carrier Route Subclass (Volumes and Revenues in Millions)						
Categories	Unit	Rates (1)	Volume (2)	Revenue (3)	Letters (4)	NonLetters (5)
<b>Letters</b>						
1 Basic	per piece	0.164	3173.765	520.497	520.497	
2 High Density	per piece	0.143	392.986	56.197	56.197	
3 Saturation	per piece	0.134	3086.387	413.576	413.576	
4 Automated	per piece	0.157	2059.662	323.367	323.367	
4a Subtotal			8712.8	1313.637	1,313.637	
<b>Nonletters, Piece-Rated</b>						
5 Basic	per piece	0.164	5897.937	967.262		967.262
6 High Density	per piece	0.153	750.655	114.850		114.850
7 Saturation	per piece	0.141	5893.965	831.049		831.049
8 Subtotal			12542.558	1913.161		1,913.161
<b>Nonletters, Pound-Rated</b>						
9 Basic	per piece	0.055	4762.7676	261.952		261.952
10 High Density	per piece	0.044	403.423	17.751		17.751
11 Saturation	per piece	0.032	2264.6339	72.468		72.468
12 Subtotal			7430.8242	352.171		352.171
13 Basic	per pound	0.530	1509.972	800.285		800.285
14 High Density	per pound	0.530	135.773	71.960		71.960
15 Saturation	per pound	0.530	670.004	355.102		355.102
16 Subtotal			2315.7493	1227.347		1,227.347
17 Total	pieces		28686.182			
<b>Dropship Discounts:</b>						
<b>Piece-Rated</b>						
18 BMC	per piece	-0.015	4193.438	-62.902	-19.122	
19 SCF	per piece	-0.018	10150.400	-182.707	-55.543	-43.779
20 DDU	per piece	-0.023	4104.013	-94.392	-28.695	-127.184
21 Subtotal			18447.852	-340.001	-103.360	-65.697
<b>Pound-Rated</b>						
22 BMC	per pound	-0.072	347.758	-25.039		-25.039
23 SCF	per pound	-0.088	1232.333	-108.445		-108.445
24 DDU	per pound	-0.110	639.214	-70.314		-70.314
25 Subtotal			2219.305	-203.797		-203.797
26 Net Revenue from Rates (L.4a+L.8+L.12+L.16+L.21+L.				4262.518	1,210.277	
27 Revenue adjustment factor (Page 1)				1.000002		3,052.241
28 Adjusted revenue from rates (L.26*L.27)				4262.527	28.39%	
29 Fees (Page 14)				33.08869		71.61%
30 Revenue from residual shape surcharge (Page 13)				8.38882		
31 Total Revenue (L.28+L.29+L.30)				4304.004		
32 TYAR revenue per piece (L.31 / L.17)				0.150038		

- (1) Lines 5,9,13,14,15 from formula, page 19. Dropship discounts from Page 9  
Other rates calculated by subtracting discounts (p.18) from Basic rates from formula.

(2) Page 20, Col (1,2,6 to 11)

(3) Col (1) \* Col (2)

Split in shaded area developed by Haldi Associates, Inc.

Source:

[1] USPS-T-36, WP1, page 23.

## **Appendix D**

### **WEIGHT-COST RELATIONSHIP**

The relationship between weight and cost of mail is an issue that has bedeviled the Postal Service and the Commission for many years. Despite a number of studies submitted by the Postal Service, including one in this docket,<sup>1</sup> the results remain inconclusive, unconvincing and inadequate for rate making purposes.<sup>2</sup> This appendix examines the weight-cost relationship in an effort to establish a framework and rationale for more definitive studies on how weight affects cost, especially within Standard Mail A.

#### **Dropship Discounts Give Rise To Multiple Weight-Cost Relationships**

The first fact that needs to be recognized is that a number of weight-cost relationships exist, even within a single subclass of Standard Mail A. For example, the Postal Service updated a study on shipping costs avoided from dropshipment in LR-H-111. Transportation costs constitute the bulk of

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<sup>1</sup> USPS-LR-H-182. A critique of LR-H-182 follows the presentation of the rationale and framework for studying the weight-cost relationship set forth in this appendix.

<sup>2</sup> Due to the Postal Service's lack of a reasonable benchmark for weight-related costs, Section IV of my testimony, which analyzes the Postal Service's proposed rates for nonletters, was forced to use a parametric approach that spanned a wide range of possible pound costs.

shipping costs avoided, with mail handling costs for activities such as cross-docking making up the remainder. Costs avoided are estimated on a per-pound basis. The Postal Service itself has identified four different weight-cost relationships for mail:

- one where there is no destination entry;
- a second where mail is entered at DBMCs;
- a third for mail entered at DSCFs; and
- a fourth for mail entered at DDUs.

Each weight cost relationship depends upon the point of entry into the Postal network.

Further, LR-H-111 uses an average density for all mail, even though the cost driver for **transportation** is density, not weight. In fact, the cost driver for certain **mail handling** costs, such as cross-docking, may also be density, not weight. Furthermore, the different rate categories within Standard Mail A have different densities.

Using density of the different existing and proposed rate categories within Standard Mail A, it would appear to be a reasonably straightforward exercise re-computing separate costs avoided for letters, flats and parcels. This would result in 12 different possible discounts for costs avoided (including “no destination entry,” where no costs are avoided), and 12 different weight-cost relationships.

With so many different weight-cost relationships, it becomes necessary to address the following questions:

- For what purpose is empirical data on the various weight-cost relationships desired? and
- Which weight-cost relationship(s) best fit(s) the stated purpose?

If the purpose is to establish **top down** rates, the weight-cost relationship for mail which is not entered at a destinating facility would appear to be the most appropriate. Weight-based discounts, which presumably make the correct adjustment for costs avoided (especially if adjusted for differences in density), may then be calculated for destination entry. Alternatively, to develop rates from the **bottom up**, the weight-cost relationship for mail entered at DDU's would appear to be the most appropriate. Weight-based costs for non-destination entry (*i.e.*, shipping costs) could then be added to this benchmark.

To conclude, LR-H-111, the Postal Service's study of dropship costs avoided identifies one important consideration influencing the effect of weight on cost: the degree to which the weight-cost relationship differs depending upon the entry point into the postal network.

### **Further Complications**

Within the preceding framework, which ignores handling costs within P&DCs, one can use the weight-cost relationship, exclusive of transportation

costs incurred or avoided, to develop either bottom up or top down rates.

Starting with the applicable weight-cost relationship, then adding or subtracting transportation costs as appropriate, will produce the same result.

The actual situation may be more complex, however. Let us examine two contrasting possibilities:

- A large nationwide mailing presorted to carrier route and entered at a single non-destinating facility without any dropship; and
- A large nationwide mailing in Basic presort condition, entered at a single non-destinating facility without any dropship.

The carrier route mailing presumably will receive little or nothing more than transportation and cross-docking until it reaches the DDU. Aside from transportation costs, the only other weight-related costs will be those incurred in the DDU and the subsequent delivery function. In other words, this mailing appears to fit within the framework discussed above; *i.e.*, no consideration needs to be given to handling costs within intermediate facilities.

The Basic presort mailing, however, will be processed within one or more P&DCs before it arrives at the DDU. With respect to this mailing, additional questions must be answered:

- What weight-related handling costs (if any) are incurred by mail that is taken from the loading dock into the facility, processed, then returned to the loading dock?
- Do presort cost differences, all of which are currently estimated solely on a per-piece basis, correctly reflect all cost differences,

or are only some of those costs piece-related, while other costs are related more to weight or density?

The Postal Service incurs substantial mail processing costs within its P&DCs. Although a significant portion of those costs are undoubtedly piece-related, some may vary with weight or density. For any given class or type of mail (*e.g.*, letters or flats) with homogeneous density, weight can be a proxy for cube because the two change in tandem. For a simple illustration, consider a bulk mailing of 1,600,000 identical letters or flats. If the mailpiece weighs 0.5 ounces, total weight will be 50,000 pounds — which is slightly more than the capacity of a 40' trailer. If the mailpieces weigh 1.0 ounce, total weight will equal 100,000 pounds (more than two trailer loads). A 2-ounce mailpiece would total 200,000 pounds. The density (pounds per cubic foot) of letters and flats may differ, but for a given type of mail, this example illustrates how weight and cube change in tandem.

How do weight and cube affect mail handling costs? More trailer loads of mail will, in general, mean more containers of every type: letter trays, sacks, OTRs, pallets, etc. Each container that enters a P&DC will have to be moved through the different mail processing operations. After use, the empty containers will have to be moved. It thus seems likely that where the Postal Service processes mailpieces, weight does affect cost, over and above those costs related solely to shipping/dropshipment.

In her direct testimony, witness Mayes explains how cube affects costs within a mail precessing plant:<sup>3</sup>

Other areas in which cube plays an important role in cost incurrence become apparent when one considers the mail processing flow models such as those developed by Postal Services witnesses Crum (USPS-T-28) and Daniel (USPS-T-29). In such models, the Postal Service attempts to measure costs for mail processing activities, including dumping containers or sacks, or crossdocking containers. The cost associated with a particular dumping or crossdocking activity is the same no matter how many pieces are in the container being dumped or crossdocked. This cost is usually assigned on a per-piece basis. But the cost per piece associated with the dumping or crossdocking activity varies with the number of pieces in the container at the time it is dumped or moved, and the number of pieces in the container depends on the cube of the pieces. Therefore, the number of pieces contained therein will necessarily be lower as the average cube of the pieces increases. Even in the absence of explicit cost analysis in other areas, such as delivery costs, the Postal Service submits that cube is, in fact, an important cost driver for Parcel Post. (emphasis added)

Although witness Mayes' principal concern is with parcel post, her cogent observations apply with equal force to letters or flats, (e.g., 1.6 million 2-ounce letters will occupy many more trays than an equal number of 0.5-ounce letters).

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<sup>3</sup> USPS-T-37, pp. 13-14.



The situation is not entirely straightforward, however. With respect to mail processing costs, witness McGrane distinguishes between distribution and non-distribution activities.<sup>4</sup> He states that:

[c]osts for non-distribution labor activities are generally in proportion to the number of items or containers that are handled in a particular operation...these costs [do not necessarily] vary proportionally with mail piece weight...because weight can influence the manner in which Standard A pieces are made up, and ultimately handled in non-distribution activities."

Witness McGrane further states that computer simulation has not been entirely successful in isolating and estimating weight-related costs.

## **Problems of LR-H-182**

A common thread running through the Postal Service's IOCS-based weight-cost studies is the almost complete lack of a theoretical foundation concerning (i) how weight affects cost, (ii) which weight-cost relationship the Postal Service is attempting to measure, and (iii) which subset of IOCS tallies (if any) can be expected to shed light on the weight-cost relationship being measured.<sup>5</sup>

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<sup>4</sup> Response of witness McGrane to VP-CW/USPS-ST44-3 (Tr. 15/7725-28).

<sup>5</sup> As noted above, weight and cube may play a highly significant role in the number of containers that enter a facility. This affects both the number of empty containers that must be handled as well as the number of IOCS tallies for "handling empty equipment." Once containers are empty, however, there is no way to know that their numbers were increased because of the weight (or cube) of the mail. This is but one problem associated with using IOCS tallies to study the

As explained above, the Postal Service faces multiple weight-cost relationships. Minimal presort mail that is not dropshipped and is entered upstream in the postal network will likely incur far more weight-related bulk handlings than will, say, saturation mail, whether entered upstream or at a destination SCF or DU. Thus, a “global” study that seeks to estimate THE weight-cost relationship is fatally flawed from the outset.

The Postal Service should study the weight-cost relationship for mail entered into the postal network at identical points. If lighter-weight pieces are entered upstream, and heavier-weight pieces are dropshipped, any study that does not control for this factor will be biased, perhaps heavily so. Unfortunately, IOCS tallies cannot record where mail is entered into the postal network. Hence, a study based on IOCS tallies cannot control for this critical element.

Witness Moeller has observed that a properly-designed study must control for variations “in the amount of drop shipping, presortation, average haul of non-dropshipped mail, and other factors, all of which could cause variations in the unit cost by weight increment.”<sup>6</sup> LR-H-182 did not control for any of these factors.

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weight-cost relationship.

<sup>6</sup> Response of the Postal Service to NAA/USPS-T36-22. This response was designated by NDMS and OCA, but was not apparently included in Volume 19.

LR-H-182 also suffers from variability due to small sample size, especially in the heavier-weight increments. This problem can be illustrated from data presented in Tables 1 and 2 of LR-H-182. Those two tables are reproduced here. Table 1 contains data for all Standard Mail A, and Table 2 contains data for flats only. Table 2 purports to show a reliable weight-cost relationship for flats. As a "reality check," Table 3 was constructed simply by subtracting the data in Table 2 from the corresponding data in Table 1.

Table 3 is thus the "residual," for letters and parcels combined. Note that the carrier route volume in Table 3 consists of 15.2 billion pieces, and the volume for "other" consists of 28.1 billion pieces. Inspection of Table 3 shows that for carrier route mail the results are obviously absurd.

- Carrier route letters and parcels weighing 5, 6, 7, 12 and 13 ounces have **negative unit costs**.
- Carrier route piece letters and parcels weighing 15 and 16 ounces have unit costs, respectively, of **\$15.40 and \$45.25**.

For "other" Standard Mail A the results, while perhaps less absurd, appear equally unreliable. The unit costs for 5-, 6- and 7-ounce pieces are, respectively, 21, 45 and 16 cents. The unit costs dance up and down, for no discernable reason, and in no systematic manner.

Serious weight cannot be given to data for flats when the "residual" produces results such as these.

## Research Recommendations

It is recommended that the Postal Service continue its modeling efforts, including but not limited to simulation models of the type discussed by witness McGrane. In order to narrow to manageable proportions the scope of research with respect to mail processing costs, it is suggested that the Postal Service employ a "bottom-up" approach and focus initially on the effect of weight on cost of mail after it arrives at DUs.<sup>7</sup> Since the CSBCS is the only sorting equipment at any DU, that should simplify the problem somewhat.

Once a reasonable understanding of the weight-cost relationship at DUs is achieved, in a bottom-up approach the next step would be to study the weight (shape) cost relationship of mail arriving at DSCFs. Such a study might have two components: (i) mail arriving from BMCs, and (ii) mail dropshipped and entered at the SCF by mailers.<sup>8</sup> Such a study would of course be limited to and focus on mail not presorted to carrier route; *i.e.*, mail that must be taken from the dock into the P&DC sorted, and then returned to the dock.

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<sup>7</sup> The effect of weight (and shape) on city and rural delivery costs can and should be studied separately.

<sup>8</sup> These two components would be appropriate only if significant differences exist between mail received from BMCs and mail that is dropshipped into an SCF.

Developing a reasonable estimate of the weight-cost relationship for just the DU and incoming P&DC components of the postal network would constitute a significant improvement over the existing situation.

### **Recommendations for the Commission**

In view of the substantial uncertainty concerning the effect of weight on cost, it is recommended that the Commission adopt a conservative approach and accept witness Moeller's proposed pound rates for Standard Mail A. The Commission should also either initiate or request that the Postal Service initiate a study of the respective shape-based weight-cost relationships for mail receiving no dropshipment and/or for mail dropshipped to DDUs.

**Table D-1**

**FY 1996 Volume Variable Unit Cost by Weight Increment  
Standard A Bulk Mail**

Weight Inc. (oz.)	Carrier Route			Other		
	Attributable Costs (000)	Mail Volume (000)	Unit Cost (cents)	Attributable Costs (000)	Mail Volume (000)	Unit Cost (cents)
1	788,270	11,884,976	6.6	2,285,008	19,888,875	11.5
2	386,172	6,618,447	5.8	959,157	8,310,370	11.5
3	310,369	6,100,688	5.1	545,665	4,143,309	13.2
4	215,977	3,024,681	7.1	521,302	3,025,509	17.2
5	120,104	2,352,129	5.1	195,698	1,615,153	12.1
6	62,508	1,145,220	5.5	151,920	904,275	16.8
7	29,064	495,384	5.9	76,972	546,745	14.1
8	16,047	176,959	9.1	84,282	370,421	22.8
9	10,646	137,224	7.8	46,548	255,938	18.2
10	6,992	70,751	9.9	48,357	201,637	24.0
11	3,727	39,292	9.5	39,991	165,235	24.2
12	1,939	21,572	9.0	50,452	168,569	29.9
13	2,239	33,805	6.6	41,204	154,530	26.7
14	1,710	13,118	13.0	42,003	127,321	33.0
15	1,731	12,681	13.7	25,253	62,867	40.2
16	1,946	10,735	18.1	21,044	37,420	56.2
	1,959,439	32,137,662	6.1	5,134,854	39,978,176	12.8

Source: LR-H-182, Table 1.

**Table D-2**

**FY 1996 Volume Variable Unit Cost by Weight Increment  
Standard A Bulk Mail - Flats**

Weight Inc. (oz.)	Carrier Route			Other		
	Attributable Costs (000)	Mail Volume (000)	Unit Cost (cents)	Attributable Costs (000)	Mail Volume (000)	Unit Cost (cents)
1	163,993	1,940,793	8.4	293,227	999,913	29.3
2	232,231	3,492,117	6.7	488,694	2,270,219	21.5
3	238,264	4,393,866	5.4	382,288	2,316,990	16.5
4	193,505	2,609,668	7.4	443,034	2,540,075	17.4
5	124,110	2,315,073	5.4	183,001	1,554,744	11.8
6	64,407	1,139,485	5.7	123,629	841,942	14.7
7	30,305	493,084	6.1	59,255	436,500	13.6
8	15,764	175,941	9.0	56,042	291,739	19.2
9	10,264	136,848	7.5	31,649	203,096	15.6
10	6,574	70,577	9.3	27,463	142,388	19.3
11	3,491	39,111	8.9	17,194	78,470	21.9
12	2,003	21,399	9.4	15,622	62,529	25.0
13	2,341	33,746	6.9	12,345	58,855	21.0
14	1,510	13,020	11.6	11,530	41,871	27.5
15	1,069	12,638	8.5	8,301	36,541	22.7
16	1,584	10,727	14.8	7,940	24,172	32.8
	1,091,415	16,898,093	6.5	2,161,215	11,900,045	18.2

Source: LR-H-182, Table 2.

**Table D-3**

**FY 1996 Volume Variable Unit Cost by Weight Increment  
Standard A Bulk Mail - Non-Flats (Letters and Parcels)**


Weight Inc. (oz.)	Carrier Route			Other		
	Attributable Costs (000)	Mail Volume (000)	Unit Cost (cents)	Attributable Costs (000)	Mail Volume (000)	Unit Cost (cents)
1	624,277	9,944,183	6.3	1,991,781	18,888,962	10.5
2	153,941	3,126,330	4.9	470,463	6,040,151	7.8
3	72,105	1,706,822	4.2	163,377	1,826,319	8.9
4	22,472	415,013	5.4	78,268	485,434	16.1
5	-4,006	37,056	-10.8	12,697	60,409	21.0
6	-1,899	5,735	-33.1	28,291	62,333	45.4
7	-1,241	2,300	-54.0	17,717	110,245	16.1
8	283	1,018	27.8	28,240	78,682	35.9
9	382	376	101.6	14,899	52,842	28.2
10	418	174	240.2	20,894	59,249	35.3
11	236	181	130.4	22,797	86,765	26.3
12	-64	173	-37.0	34,830	106,040	32.8
13	-102	59	-172.9	28,859	95,675	30.2
14	200	98	204.1	30,473	85,450	35.7
15	662	43	1539.5	16,952	26,326	64.4
16	362	8	4525.0	13,104	13,248	98.9
	868,026	15,239,569	5.7	2,973,642	28,078,131	10.6

Source: Table 1 minus corresponding entry in Table 2.



**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served the foregoing document upon all participants of record in this proceeding in accordance with Section 12 of the Rules of Practice.

  
William J. Olson

December 30, 1997